EDUCATION **INDICATORS** – 2010 edition

Québec

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Ministère de l'Éducation,
du Loisir et du Sport
Direction générale
des politiques, de la recherche
et de la planification stratégique

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Introduction

This edition of the Education Indicators deals with all levels of education, from kindergarten to university. Some indicators cover the education system as a whole, whereas others focus on a specific level.

The purpose of publishing indicators is to ensure accountability by providing specific information on the resources allocated to education, the various activities pursued by the education system and the results obtained. The indicators are presented under a series of headings classifying recent and historical data that helps trace these developments over time.

The development of education indicators in Québec is part of a larger movement. The Council of Ministers of Education, Canada (CMEC) has undertaken projects to develop indicators for Canada's provinces; the Organisation for Economic Co-operation and Development (OECD) has done the same for its member countries; and the United Nations Educational, Scientific and Cultural Organization (UNESCO) has also published a series of indicators on education throughout the world. Québec has been an active participant in this worldwide movement, having published the first edition of the Education Indicators in 1986.

The examination of the indicators in this publication reveals a number of trends and developments that characterize Québec's education system. Some are explained briefly below. Additional information on these topics and others can be found further on in this document.

Financial Resources Allocated to Education

In 2008-2009, Québec's total educational spending was estimated at 7.6% of the gross domestic product (GDP). The share of the GDP allocated to education in the rest of Canada was estimated at 5.9%.

Total school board spending amounted to $1 429 per capita in 2008-2009, or 11.0% less than the average for the rest of Canada ($1 606). Per capita spending in Québec universities was 5% lower than in universities in the rest of Canada ($761 compared with $798). However, total per capita spending in Québec's colleges was higher: $321, compared with $271 in the rest of Canada. In Québec, the provincial government provides a large part of the funds for total spending (68.8%) whereas elsewhere in Canada, this proportion is much lower (53.4%). In recent years, the Québec government has devoted approximately a quarter of its program spending to education.

Another indicator that is often used to compare Québec with neighbouring regions is total per-student spending. In 2008-2009, total per-student spending in Québec school boards ($11 093) was slightly higher than that in the rest of Canada ($11 031). However, it should be noted that this comparison of per-student spending among the various provinces does not take into account the cost of living, which is lower in Québec than the average in the rest of Canada (7.5% gap in 2008-2009). If the data were adjusted to take this into account, per-student spending would be 8% higher in Québec than in the rest of Canada (in real terms).

Per-student operating expenses in CEGEPs were estimated at $9 761 in 2008-009, or 46% higher than in 1998-1999. This sharp increase can be explained in large part by a decrease in the student-teacher ratio, which went from 13.8 in 1998-1999 to 12.6 in 2008-2009. In addition, total per-student spending in Québec universities was estimated at

$29 941 in 2008-2009, 6% more than the average for the rest of Canada ($28 314). The average salary of full-time university professors in Québec was lower than in the rest of Canada ($100 124, compared with $105 574 in 2007-2008), but average number of students per professor was lower in Québec (more costly factor).

In 2008-2009, 138 774 persons benefited from Québec's Loans and Bursaries Program. Of the financial assistance granted to Québec university students, 54.9% was in the form of loans and 45.1% in the form of bursaries. Tuition fees in 2009-2010 averaged $2 272 in Québec for full-time undergraduate studies ($1 968 for Québec residents), compared with $5 535 in the rest of Canada.

Student Retention From Elementary School to University

Student retention in Québec's education system for 2008-2009, is illustrated on the following page. The diagram represents the proportions of a cohort of young people who could expect to enroll and to obtain a diploma or degree in each level of education. The diagram shows that, out of 100 Quebeckers, 99 could be expected to reach the secondary level and 88 to obtain a first secondary school diploma, 40 to obtain a Diploma of College Studies (DCS), 32 to earn a bachelor's degree, 9 to be awarded a master's degree, and 1 to obtain a doctorate. Of the 88 students to obtain a secondary school diploma, 31 would do so in vocational training. However, the educational playing field was far from level for the sexes in 2007-2008: more male students than female students (16% compared with 7%) left their studies before earning a diploma or degree. At the other extreme, in 2008, approximately 40% of women obtained at least a bachelor's degree, compared with only 25% of men.

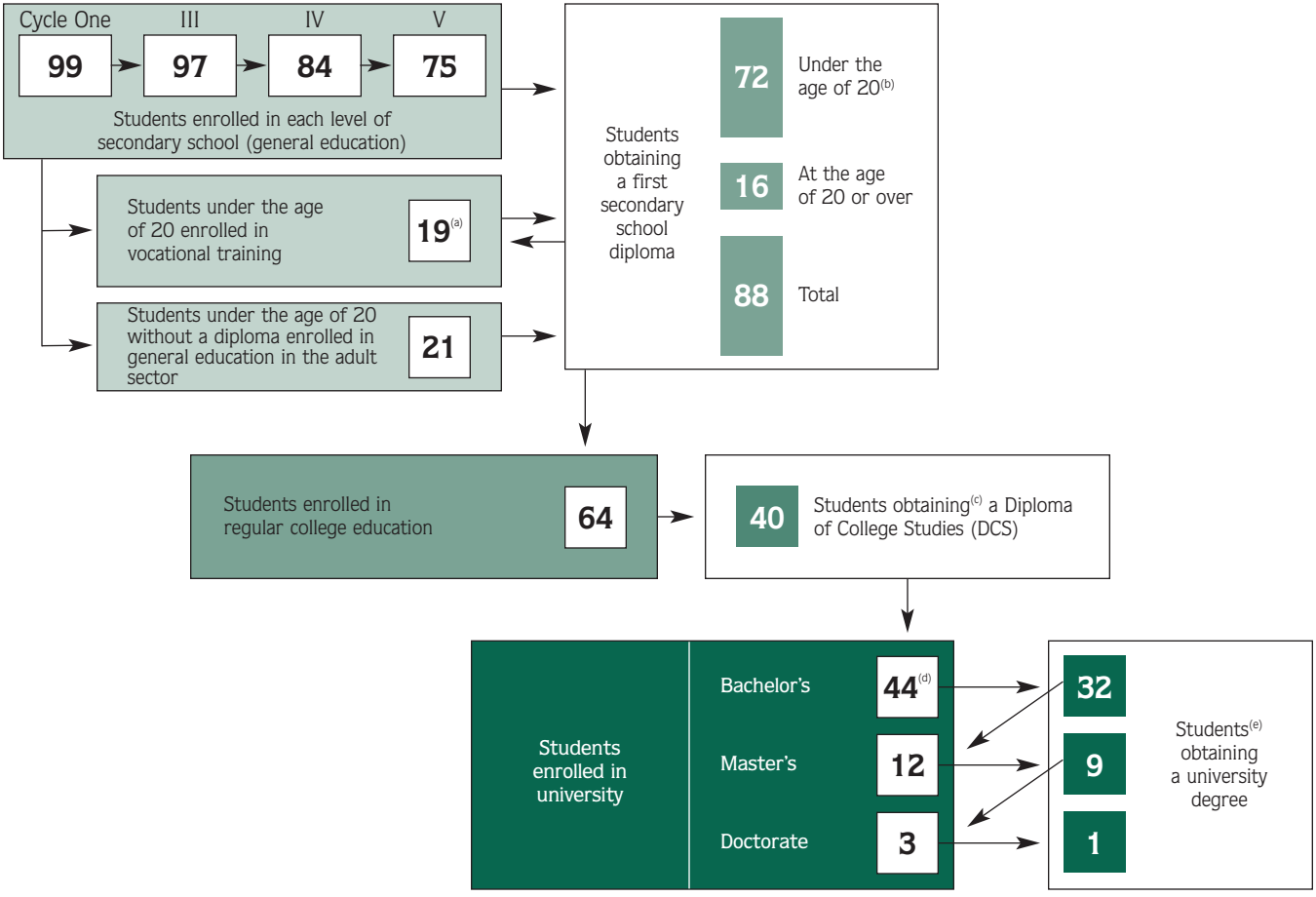
Children who began elementary school in 2008-2009 can expect to be in school for 15.7 years (assuming that the success rates and retention rates prevailing in the education system in the current year do not change). Secondary school graduates will have been in school for 11.2 years, at an estimated cost of $135 335 in 2008-2009; those obtaining a bachelor's degree will have studied for 17.2 years, at an estimated total cost of $246 105.

Staying in School and Obtaining a Diploma

The dropout issue is a major concern among educators. Numerous approaches have shed light on this phenomenon. Educational success, defined here as obtaining a diploma, is measured differently for each level and sector of education. The proportion of 19-year-olds who left school without a secondary school diploma was 18.3% in 2008.

The proportion of students in other education sectors who obtained diplomas or degrees and the proportion who left school either temporarily or permanently were determined by observing the number of students who leave school each year. Thus, of the students in Secondary Cycle Two in the adult sector who left their studies before the age of 20, 62.5% did so with a diploma. In secondary vocational training, of 100 students of all ages who were enrolled in programs leading to a Diploma of Vocational Studies (DVS) and who left secondary school, 74 did so with a diploma. At the college level, 72.4% of students in pre-university programs leading to a DCS obtained a diploma; in technical training, 62% of students obtained a DCS. At the university

Student Retention of 100 Quebeckers in the Education System, Based on Findings for 2008-2009



(a) This figure includes 9 general education graduates likely to obtain another diploma in vocational training.
(b) All diplomas earned in the youth sector are included, regardless of the age of the graduates.
(c) The most recent year for which data is available is 2007-2008.
(d) Students who enroll in university are not limited to those who hold a DCS.
(e) The most recent year for which data is available is 2007.

level, 67% of students in bachelor's programs obtained a degree. Of the students enrolled in master's and doctoral programs, 71% and 56%, respectively, earned their degree.

Evaluation of Learning

In the subjects for which uniform examinations were administered for the certification of studies by the Ministère de l'Éducation, du Loisir et du Sport in June 2009, students in Secondary IV and V obtained an average mark of 74.4% and had a success rate of 87.4%. The male students' average was 73.6% and the female students', 75.2%. Students obtained an average final mark of 72.8% on the examination in Secondary V French, language of instruction, and 91.2% passed. In 2008-2009, 82.8% of college students passed the ministerial examination of college French, language of instruction and literature.

What Becomes of Graduates and Non-Graduates

When they finish school, graduates from secondary school, college and university have to make choices. Some decide to continue their education, while others set their sights on the labour market. In 2007-2008, at the end of their college studies, 79.7% of pre-university program graduates under the age of 25 went on to university the following year, compared with 26.0% of graduates from technical programs.

In March 2009, graduates with a DVS or AVS had an unemployment rate of 12.8% and 10.9%, respectively, compared with 4.4% for graduates of college technical programs. Since 1990, the profile of the labour force in Québec has changed significantly. In 2009, the increase in the number of jobs was more beneficial to those who graduated from postsecondary or university studies. During the same period, the number of employed people who did not have a secondary school diploma dropped by 44.7%.

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Readers seeking a more in-depth analysis or an up-to-date picture of the situation should consult the individual sections in the pages that follow. Also, the Ministère de l'Éducation, du Loisir et du Sport and the Conseil supérieur de l'éducation produce and publish specialized studies on these topics. Finally, general information on the education system is available in the following publications:

- *Basic Statistics on Education*
- *Education Statistics Bulletins*
- *Student Flow from Secondary School to University*
- *Annual management report of the Ministère de l'Éducation, du Loisir et du Sport*
- *Annual Report on the State and Needs of Education, published by the Conseil supérieur de l'éducation*
- *Strategic Plan of the Ministère de l'Éducation, du Loisir et du Sport.*

This information is also available on the Web site of the Ministère de l'Éducation, du Loisir et du Sport (www.mels.gouv.qc.ca).

Québec's Education System: An Overview

Québec's education system offers a wide range of educational programs and services from kindergarten to university.

Preschool, Elementary and Secondary Education

Elementary school normally lasts six years; secondary school, five. Children are admitted to the first year of elementary school in the school year in which they will have turned 6 years of age by October 1. Kindergarten is not compulsory, but, as of the fall of 1997, almost all 5-year-olds attend full-time. Four-year-olds with handicaps or living in low-income areas may be admitted to preschool. School attendance is compulsory until the year in which students turn 16 years of age, which normally corresponds to Secondary IV.

Elementary education is offered in French, English or an Aboriginal language, and secondary education, in French or English. Students deemed eligible to study in English are chiefly those whose father or mother attended English elementary school in Canada. Public elementary and secondary education is provided by school boards. The school boards are managed by school commissioners, who are elected by residents within the school board's jurisdiction. The school boards hire the staff they need to provide educational services. In 2008-2009, the Québec government funded 77% of school board expenses, while local taxes accounted for 15% of school board revenues, and other sources provided the remaining 8%.

In July 1998, the number of school boards was reduced to 72, and they were organized along linguistic lines, except for three with special status. There are 60 French school boards and 9 English school boards, with enrollments ranging from 600 to 70 000 for a median size of approximately 8 000 students. The special-status school boards serve French-speaking and English-speaking students in the Côte-Nord region (Commission scolaire du Littoral) and Aboriginal students in the Nord-du-Québec region (Cree School Board and Kativik School Board).

Elementary and secondary education is also provided by private institutions, some of which are subsidized by the Ministère de l'Éducation, du Loisir et du Sport. The private school system accounts for 7% of elementary students and approximately 19% of secondary students in the youth sector. About half of the operating expenses of subsidized private institutions are funded by the Québec government. Elementary and secondary education is also offered by some public institutions that are not part of the school board system but that fall under Québec or federal government jurisdiction; these institutions account for 0.1% of students.

Secondary school diplomas are awarded by the Minister of Education, Recreation and Sports to students who fulfill the certification requirements set by the Minister. A Secondary School Diploma (SSD) is required for admission to college.[1] A Diploma of Vocational Studies (DVS) generally leads to the labour market, but also allows admission to college. The harmonization of educational services offered in the youth sector and the adult sector is a feature of Québec's education

1. Since the fall of 1997, students who earned a Secondary School Diploma (SSD) or a Diploma of Vocational Studies (DVS) after May 31, 1997, must also have accumulated the required number of credits for Secondary IV History and Physical Science, Secondary V Language of Instruction and Second Language, and Secondary V Mathematics or a comparable Secondary IV Mathematics course determined by the Minister. The Minister sets specific secondary-level prerequisites for some programs leading to a DCS.

system. Adult education leads to secondary school diplomas that are the same as or equivalent to those offered in the youth sector.

College Education

Students may enroll in college programs leading to a Diploma of College Studies (DCS) or in short technical programs leading to an Attestation of College Studies (ACS). College education theoretically consists of a two-year program for students enrolled in pre-university education or a three-year program for those in technical training; technical programs are primarily designed to provide entry into the labour market, but also allow admission to certain disciplines in university.

Students may pursue their college studies in the language of instruction of their choice. Public college education is provided by CEGEPs (a French acronym that stands for general and technical college). CEGEPs are administered by boards of directors composed of representatives of the socioeconomic community appointed by the Minister, as well as representatives of parents, students, teachers, nonteaching professionals and support staff, a director general and a director of studies. In 2008-2009, the Québec government funded 94% of CEGEP operating expenses for regular (pre-university) programs. Private educational institutions served 7% of college students, and 54% of their expenses were funded by the government. College education is also available at a few institutions associated with ministries other than the Ministère de l'Éducation, du Loisir et du Sport and by the Macdonald Campus of McGill University.

A DCS is awarded to a student by the Minister of Education, Recreation and Sports following the recommendation of the institution attended. For shorter programs, other types of certification are awarded.

University Education

Québec has English and French universities; students are free to attend the university in the language of instruction of their choice. University education is divided into three levels of studies. The first leads to a bachelor's degree (generally after three years or, less frequently, four years in certain programs), the second to a master's degree, and the third to a doctoral degree. Universities also award certificates, diplomas and other forms of attestation to certify the successful completion of short programs. In 2007-2008, 53% of university expenses were subsidized by the Québec government.

Ministère de l'Éducation, du Loisir et du Sport

The Ministère de l'Éducation, du Loisir et du Sport fulfills different functions for the various levels of education. For preschool, elementary, secondary and college education, the Ministère develops programs and determines objectives and often content or standards. In terms of labour relations, it negotiates and signs provincial agreements. In terms of financing, it establishes a standard framework and provides the largest share of resources. At the university level, it promotes the advancement of teaching and research by providing universities with the resources required for operation and development while respecting their autonomy and fostering collaboration among the various partners.

1.1 Québec Government Spending on Education, Recreation and Sports

The Québec government's spending on education, recreation and sports was estimated at $14.4 billion in 2009-2010, accounting for 24.1% of government program spending.[1]

Québec government program spending rose from $43.9 billion in 2002-2003 to $60.0 billion in 2009-2010, an increase of $16.1 billion.

Table 1.1 presents the percentage breakdown of Québec government program spending in the four major sectors: education, recreation and sports; health and social services; employment and social solidarity; and families, seniors and the status of women. Spending on other portfolios and programs are grouped together under "Other Portfolios." The table makes it possible to compare changes in the portion of government spending allocated to education, recreation and sports with those in the other major sectors.

A comparison of program spending in the major sectors during the period considered reveals significant changes in the portion of spending allocated to each sector. Between 1995-1996 and 2009-2010, the portion allocated to health and social services increased from 36.1% to 44.8%. This significant increase has had a major impact on the portion of spending allocated to the other sectors.

The portion of spending allocated to families, seniors and the status of women increased from 1.2% to 3.4% during the same period, while that allocated to employment and social solidarity decreased, like that of the "Other Portfolios."

The portion of program spending on education, recreation and sports also dropped. Between 1995 and 1998, it dropped by 3.2 percentage points, going from 29.1% to 25.9%. This decrease was in large part due to budget cuts and strict cost-cutting measures in educational institutions.

In 2002-2003, the portion of program spending on education, recreation and sports was 25.5%, while in 2009-2010, it stood at 24.1%. Despite this decrease in relative importance, it should be noted that the budget for this sector increased from $11.2 billion in 2002-2003 to $14.4 billion in 2009-2010, an increase of $3.2 billion (an annual increase of 3.7%). This strong spending increase in education, recreation and sports can be explained by the rise in system costs, but also by the numerous reinvestment and development measures.[2]

Between 2007-2008 and 2009-2010, the budget for education, recreation and sports increased by more than $1 billion. This amount includes the addition of specialized resources in elementary and secondary school for students with special needs (students with handicaps, social maladjustments or learning disabilities) and the new basic school regulation, additional funding for the student financial assistance program and the government's various reinvestment measures aimed at higher education. These reinvestment measures for higher education include additional resources following partial recovery of federal transfers intended for postsecondary education.

Québec Government spending on education, recreation and sports was estimated at $14.4 billion in 2009-2010, that is, $3.3 billion more than in 2002-2003.

1. *The amount allocated to the development of recreation and sports was $64 million in 2009-2010.*
2. *See sections 1.7, 1.11 and 1.14, among others.*

Table 1.1
Québec government program spending, by sector[1] (%)

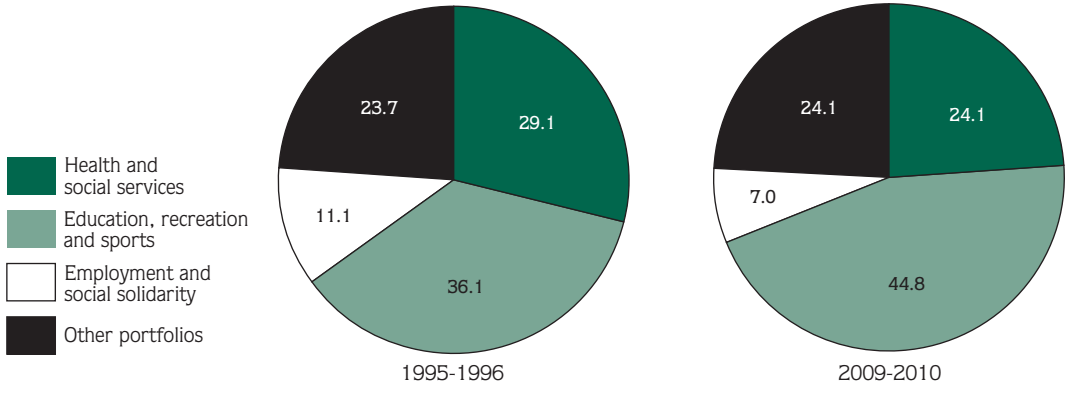
	1995-1996	1998-1999	2002-2003	2007-2008	2008-2009[e]	2009-2010[e]
Education, recreation and sports	**29.1**	**25.9**	**25.5**	**24.4**	**24.3**	**24.1**
Health and social services	36.1	39.3	40.7	43.9	44.3	44.8
Employment and social solidarity	11.1	11.3	9.6	7.6	7.3	7.0
Families, seniors and the status of women	1.2	1.6	2.9	3.4	3.4	3.4
Other portfolios	22.5	21.9	21.3	20.7	20.7	20.7
Program spending	100.0	100.0	100.0	100.0	100.0	100.0

Source: Conseil du trésor, Budget de dépense 2009-2010, *volume IV.*

e: Estimates

1. Data related to program spending is presented according to the 2009-2010 budgetary structure.

Graph 1.1
Distribution of Québec government program spending, by sector (%)



1.2 Total Educational Spending in Relation to GDP

In 2008-2009, Québec allocated an estimated 7.6% of its gross domestic product (GDP) to education,[1] compared with the Atlantic Provinces at 6.7%, Ontario at 6.2%, and Western Canada at 5.3%. When this indicator is considered, it is evident that Québec educational spending remains higher than the average for the other provinces. In the United States, 7.5% of GDP was spent on education.

Between 1995 and 2000, the share of GDP spent on education decreased in all regions of Canada, mostly due to budget cuts. In Québec this share dropped from 8.1% to 7.1%, and in the rest of Canada, from 7.0% to 6.0%.

When the share of GDP allocated to education in Québec is compared with that allocated by the member countries of the Organisation for Economic Co-operation and Development (OECD) in 2006, Québec stands out among those with the highest educational spending. This is primarily because teaching costs are relatively higher in Québec than the OECD average. The fact that postsecondary education is more developed in Québec than in the OECD countries also contributed to Québec's higher level of educational spending.[2]

To explain why Québec invested a greater share of its GDP in education than the rest of Canada in 2008-2009, the following four factors may be considered: per-student spending; collective wealth (defined by per capita GDP); the school attendance rate (the ratio of total school enrollment to the population between 5 and 24 years old); and the demographic factor (the ratio of the 5 to 24 age group to the total population). Two of these four factors help explain why Québec invests a greater share of its GDP in education: Québec's lesser collective wealth compared with the rest of Canada and the slightly higher school attendance rate in Québec. The democratic factor (slightly older population in Québec) had the opposite effect. However, per-student spending was more or less the same in Québec as in the rest of Canada and therefore did not contribute to the greater share of GDP to education in Québec in 2008-2009.

Per-student spending in Québec was almost the same as that observed in the rest of Canada, in spite of the fact that teachers' wages are generally lower in Québec. There are more costly factors in Québec, such as lower student-teacher ratios; more spending on vocational training, school childcare services and transportation expenses in the school boards; and greater financing and research costs in universities.[3]

There is, however, an important point to be made about the difference between per-student spending in Québec and in the rest of Canada regarding differences in the cost of living. The cost of living was lower in Québec than in the rest of Canada (about 7.5% lower in 2008-2009). If expenses were adjusted to take this into account, per-student spending would be higher in Québec than in the rest of Canada.

> In 2008-2009, the share of the GDP allocated to education was higher in Québec than in the rest of Canada.

1. *In 2008-2009, Québec spent $23.0 billion of its $301.5-billion GDP on education. The concept of total spending used in this section is defined at the bottom of Table 1.2. This concept is more inclusive than the one used in Section 1.1, which takes into account government spending only.*
2. *See Marius Demers, "Educational Spending Relative to the Gross Domestic Product (GDP) in 2004. A comparison of Québec and the OECD Countries,"* Education Statistics Bulletin 35 *(December 2007). This document, which was published by the MELS Direction de la recherche, des statistiques et de l'information, is available at:* http://www.mels.gouv.qc.ca/sections/publications/index.asp?page=bullStatEducation. *An update is available for 2006.*
3. *See sections 1.8, 1.9, 1.10, 1.14 and 1.15, among others.*

Table 1.2
Total educational spending[1] in relation to GDP: Québec and the other regions of Canada (%)

	1995-1996	2000-2001	2002-2003	2004-2005	2006-2007[e]	2008-2009[e]
Québec	**8.1**	**7.1**	**7.4**	**7.2**	**7.6**	**7.6**
Canada, excluding Québec	**7.0**	**6.0**	**6.2**	**6.1**	**6.2**	**5.9**
Atlantic Provinces	9.3	7.8	7.4	7.2	7.0	6.7
Ontario	6.7	5.6	5.6	6.0	6.3	6.2
Western Canada	6.7	6.2	6.5	6.1	5.9	5.3
Canada	**7.2**	**6.3**	**6.4**	**6.4**	**6.5**	**6.2**
United States	**N/A**	**7.0**	**7.2**	**7.4**	**7.4**	**7.5**

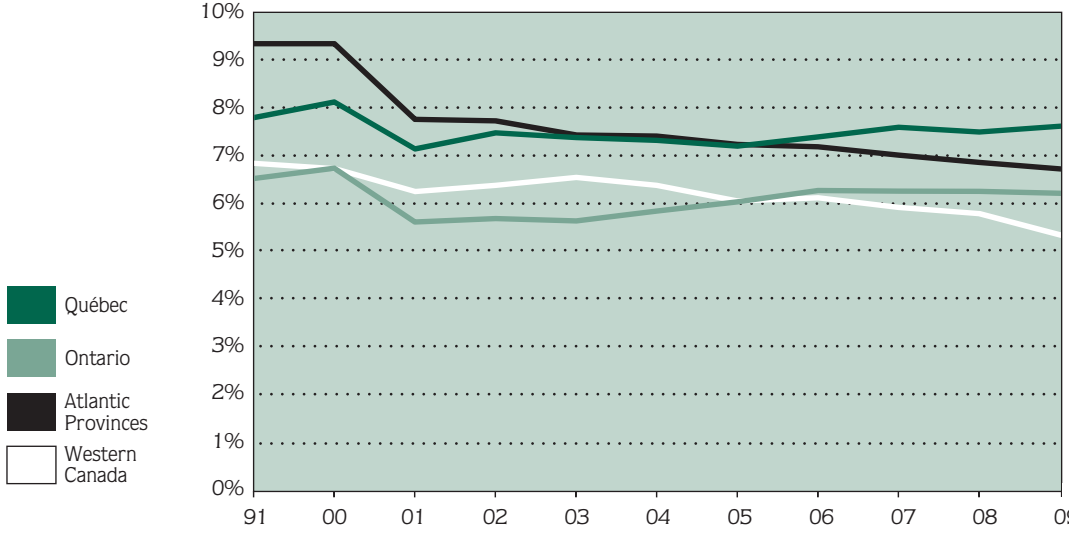
Sources: The basic data used to calculate this indicator were obtained from Statistics Canada.

e: Estimates made by the DRSI of MELS

N/A: Data not available

1. Total educational spending includes the operating and capital expenses of all levels of public and private education, the Ministère's administrative expenses, government contributions to employee pension plans, and other education expenses (as defined by Statistics Canada).

Graph 1.2
Total educational spending in relation to GDP: Québec and the other regions of Canada (%)



1.3 Total Educational Spending[1] Per Capita in School Boards, Colleges and Universities

In 2008-2009, total spending per capita was lower in Québec school boards ($1 429) than in the rest of Canada ($1 606), but higher in Québec colleges ($321) than in the rest of Canada ($271). It was lower in Québec universities and than in universities in the rest of Canada ($761 compared with $798).

Table 1.3a shows the data on total spending per capita by level of education in 2008-2009. The differences in total per capita spending observed between regions for a given level of education are explained in part by the organizational differences between the education systems. Thus, the fact that total per capita spending in Québec school boards is lower than in the rest of Canada (with the exception of the Atlantic Provinces) is explained in part by the shorter duration of studies in Québec (11 years in Québec and normally 12 years in the rest of Canada). Conversely, total spending per capita at the college level is higher in Québec than in the rest of Canada because of the unique characteristics of our college network (including the mandatory two years of college before entering university).[2]

Table 1.3b shows data on the direct sources of funds for total educational spending in 2002-2003 (the most recent data available). These figures indicate that, in Québec, provincial subsidies make up a large part of the financing for education (68.8%). This percentage is higher than in the Atlantic Provinces (66.7%), Ontario (49.5%) and Western Canada (54.3%).

In the other provinces, financing sources other than the government play a larger role for one or more of the following reasons: local funding is more significant, tuition fees are higher, or educational institutions in the other regions are in a better position to obtain other sources of funding.[3]

In 2009-2010, tuition fees charged to a university student in Québec ($2 272) represented 41% of the amount charged in the rest of Canada ($5 535).[4] Furthermore, unlike in Québec, students in the other provinces enrolled at a level equivalent to college are usually required to pay tuition fees. Thus, most students enrolled full-time in programs leading to a diploma or certificate in a technical college in Ontario were required to pay approximately $2 000 a year in tuition fees.[5] This amount does not include other compulsory fees, textbooks or supplies.

In 2008-2009, total spending per capita was lower in Québec school boards and universities than in the rest of Canada; the reverse was true for colleges.

1. *Total educational spending includes operating and capital expenses, research costs (for universities) and interest on debt service (but not repayment of principal), as well as other teaching expenses. Because of the availability of certain data, the concept of total expenses in this section differs slightly from one level of education to another. See Sections 1.6 and 1.13 for more comprehensive definitions of total expenses for school boards and universities.*
2. *See Section 1.4 for the organizational differences at the college level.*
3. *It must be noted, however, that there are comparatively more private schools in Québec than in the rest of Canada, and that tuition fees paid to the schools are included in the other sources of funding.*
4. *Tuition fees for students residing in Québec were $1 968 per year in 2009-2010. See Note 1 at the bottom of Table 1.16.*
5. *Tuition fees are much higher for some programs.*

Table 1.3a
Total spending per capita in school boards, colleges and universities: Québec and the other regions of Canada, 2008-2009[e] (in current dollars)

	School boards	Colleges[1]	Universities
Québec	**1 429**	**321**	**761**
Canada, excluding Québec	**1 606**	**271**	**798**
Atlantic Provinces	1 509	221	849
Ontario	1 639	227	798
Western Canada	1 566	329	797
Canada	**1 566**	**282**	**790**

Table 1.3b
Direct sources of funds for total educational spending: Québec and the other regions of Canada, 2002-2003 (%)

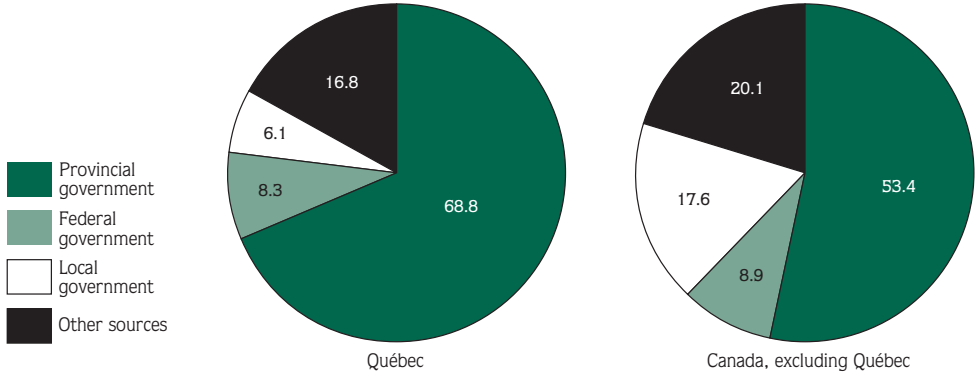
	Provincial government	Federal government	Local government	Other sources	Total
Québec	**68.8**	**8.3**	**6.1**	**16.8**	**100.0**
Canada, excluding Québec	**53.4**	**8.9**	**17.6**	**20.1**	**100.0**
Atlantic Provinces	66.7	12.1	3.0	18.2	100.0
Ontario	49.5	6.9	21.7	21.9	100.0
Western Canada	54.3	10.0	16.7	19.0	100.0
Canada	**57.0**	**8.8**	**14.9**	**19.3**	**100.0**

Sources: The basic data used to calculate this indicator were obtained from Statistics Canada and the Canadian Association of University Business Officers (CAUBO), among others.

e: Estimates made by the DRSI of MELS

1. See Section 1.4 for the organizational differences at the college level.

Graph 1.3
Direct sources of funds for total educational spending: Québec, and Canada excluding Québec, 2002-2003 (%)



1.4 Total Educational Spending per Student[1] in Relation to Per Capita GDP

Total per-student spending is an indicator of financial investment in education, and the per capita gross domestic product (GDP) is an indicator of collective wealth. Relating the two provides an indicator of the relative financial investment in education, that is, per-student spending expressed as a percentage of per capita GDP. In addition to each region's ability to pay, this ratio takes into account differences in the cost of living.

In 2008-2009, total per-student spending at the elementary and secondary levels was slightly higher in Québec ($11 093) than the average for the rest of Canada ($11 031). It was higher than in the Atlantic Provinces ($10 721) and Ontario ($10 850), but slightly lower than in Western Canada ($11 250).[2]

In 2008-2009, total per-student spending at the college level was lower in Québec ($12 683) than in the Atlantic Provinces ($20 081), Ontario ($14 880) and Western Canada ($23 111). The comparisons of spending at the college level are provided as a reference only, since data at this level cannot truly be compared between provinces because of significant organizational differences. For example, in Québec, a Diploma of College Studies in pre-university education is the usual requirement for admission to university, whereas in the other provinces, a secondary school diploma is generally sufficient. In Ontario, college-level technical programs are offered at colleges of applied arts and technology. In some cases, the programs offered can be compared, to a certain extent, with vocational training programs offered by Québec school boards. More often, they are comparable to the technical training programs offered by Québec CEGEPs. Furthermore, in some provinces in Western Canada (especially Alberta and British Columbia), students can do their first two years of university in a college, and then finish their studies at a university.

Total per-student spending at the university level in 2008-2009 was higher in Québec ($29 941) than in Ontario ($25 763) and in the Atlantic Provinces ($25 150), but lower than in Western Canada ($33 563). The previously mentioned organizational differences partly explain the gaps observed between the regions.[3]

Table 1.4b shows total per-student spending in relation to per capita GDP. Factoring in collective wealth, as measured by per capita GDP, reveals that Québec's collective financial investment in education is higher than in the rest of Canada.

Québec's collective investment in education is higher than the average for the rest of Canada.

1. *Total educational spending includes operating and capital expenses, research costs (for universities) and interest on debt service (but not repayment of principal), as defined by Statistics Canada. Because of the availability of certain data, the concept of total spending in this section differs slightly from one level of education to another. See Sections 1.6 and 1.13 for more comprehensive definitions of total expenses for school boards and universities. Moreover, in the calculation of total per-student spending at the college and university levels, a standardized accounting of student enrollments for all the provinces based on the following convention has been used: part-time enrollments are converted into full-time equivalents by dividing them by 4.0 (for colleges) and 3.5 (for universities), and are then added to full-time enrollments.*
2. *See Sections 1.8 to 1.10 for additional explanations on comparisons between school boards in Québec and in the rest of Canada.*
3. *See Section 1.14 for additional explanations.*

Table 1.4a
Total per-student educational spending: Québec and the other regions of Canada, 2008-2009[e] (in current dollars)

	School boards	Colleges	Universities
Québec	**11 093**	**12 683**	**29 941**
Canada, excluding Québec	**11 031**	**18 848**	**28 314**
Atlantic Provinces	10 721	20 081	25 150
Ontario	10 850	14 880	25 763
Western Canada	11 250	23 111	33 563
Canada	**11 044**	**16 598**	**28 663**

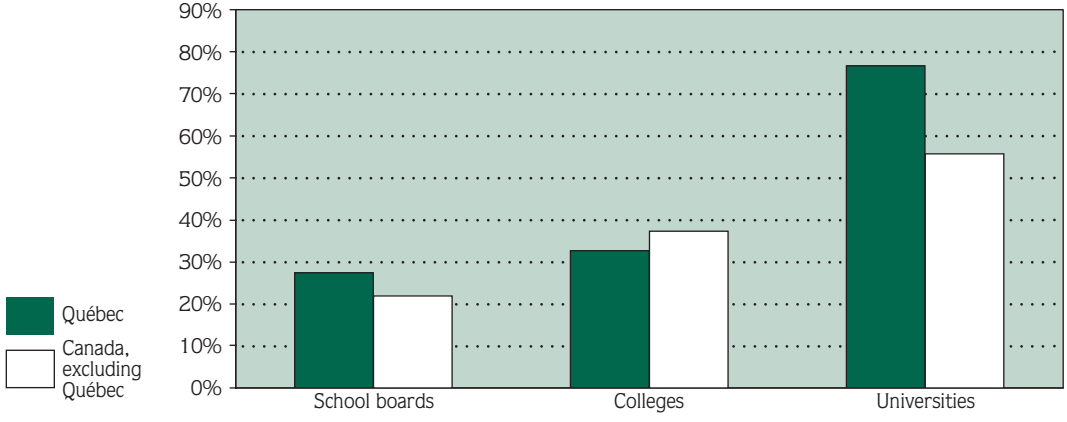
Table 1.4b
Total per-student educational spending in relation to per capita GDP: Québec and the other regions of Canada, 2008-2009[e] (%)

	School boards	Colleges	Universities
Québec	**27.1**	**32.5**	**76.8**
Canada, excluding Québec	**21.7**	**37.1**	**55.8**
Atlantic Provinces	25.6	48.0	60.1
Ontario	23.9	32.7	56.7
Western Canada	19.0	39.1	56.7
Canada	**23.0**	**34.6**	**59.7**

Sources: The basic data used to calculate this indicator were obtained from Statistics Canada and CAUBO, among others.

e: Estimates made by the DRSI of MELS.

Graph 1.4
Total per-student educational spending in relation to per capita GDP: Québec, and Canada excluding Québec, 2008-2009 (%)



1.5 Cost of Educating Graduates

In 2008-2009, the total cost of a secondary school diploma in Québec was estimated at $135 335, that of a college-level pre-university or technical diploma at $162 543 and $197 961, respectively, and that of a bachelor's degree at $246 105.

The concept of cost used here includes operating expenses (excluding funded research), capital expenses, the Ministère's administrative expenses and the cost of the student financial assistance program. For graduates with a Secondary School Diploma (SSD), the cost is based on all the years during which school was attended at the preschool, elementary (regular) and secondary (general) levels. For students graduating with a Diploma of College Studies (DCS) in pre-university education, the cost is based on all the years attended at the preschool, elementary (regular), secondary (general) and college (pre-university) levels. For students graduating with a DCS in technical training, the cost is based on all the years attended at the preschool, elementary (regular), secondary (general) and college (technical) levels. For graduates with a bachelor's degree, the cost is based on all the years attended at the preschool, elementary (regular), secondary (general), college (pre-university) and undergraduate levels.

To calculate the cost of educating a graduate, an estimate of the annual spending per student at each level of education in 2008-2009[1] as well as the average duration of studies completed by students who obtained the diploma or degree was used.[2] The expenses incurred by students leaving school without a diploma or degree were not taken into account.

As noted in Section 1.3, government subsidies make up a large part of the funding for education. However, the government also reaps a large portion of the benefits related to the earning of diplomas or degrees.

When we compare the income of two individuals with different levels of schooling, we usually observe that the person with the higher level of education is the one with the higher income (see Graph 1.5). This extra income benefits not only the person with the higher level of education, but society as well. In fact, through taxation, governments recover a large portion of the extra income earned by the individual with the higher level of education. There are, however, a number of other public benefits in addition to the supplementary tax income produced by an increase in the number of graduates. For example, people with a higher level of education cost less to society in terms of the use of certain public services (such as last resort financial assistance and costs related to criminal activity). There is also a positive correlation between a person's level of education and state of health.[3]

In 2008-2009, the total cost of a bachelor's degree was approximately $246 000 in Québec.

1. *Here, the university level encompasses undergraduate, graduate and doctoral studies. The cost of studies leading to a bachelor's degree is therefore slightly overestimated.*
2. *At the university level, one year of studies equals two full-time terms. A part-time term is counted as one third of a full-time term at the university level and one quarter at the college level. See Note 1 at the bottom of Table 1.5.*
3. *See Marius Demers, "Rate of Return on a Bachelor's Degree: for Individuals and for the State,"* Education Statistics Bulletin 38 *(December 2008). This document, which was published by the MELS Direction de la recherche, des statistiques et de l'information, is available at:* http://www.mels.gouv.qc.ca/sections/publications/index.asp?page=bullStatEducation.

Table 1.5
Cost of educating graduates, 2008-2009[e]

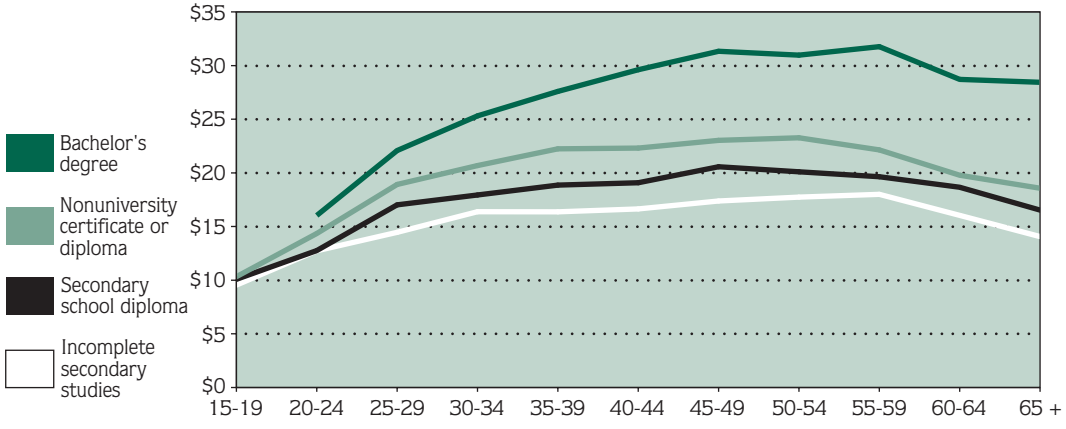
	Average duration of studies[1] (years)	Cost of education ($)[e]
Secondary School Diploma	**11.2**	**135 335**
Diploma of College Studies		
Pre-university education	13.6	162 543
Technical training	15.0	197 961
Bachelor's degree	**17.2**	**246 105**

Sources: The basic data used to calculate this indicator were obtained from Statistics Canada, CAUBO and MELS information systems.

e: Estimates made by the DRSI of MELS

1. Preschool education is included in the cost but not in the average duration of studies indicated in the table, since it is not generally recognized as a year of academic pursuit. The actual durations indicated in the table are longer than the theoretical durations for a number of reasons, including students having to retake a course after failing it and changing programs in the course of their studies.

Graph 1.5
Average hourly wage, by age group and highest level of education achieved in 2009 (in current $)



1.6 Total School Board Spending in Relation to GDP

In 2008-2009, it was estimated that 3.7% of Québec's gross domestic product (GDP) was spent in school boards,[1] compared with the Atlantic Provinces at 3.6%, Ontario at 3.6% and Western Canada at 2.6%. In the United States, the share of GDP allocated to public elementary and secondary education was estimated at 4.2%. Québec therefore spent a larger share of its GDP in school boards than the average for the rest of Canada, even though the duration of elementary and secondary education in Québec is shorter.[2]

Between 1997 and 2004, in spite of a major reinvestment in education in Québec, the share of GDP spent in school boards decreased (see Table 1.6). This is due primarily to the fact that, despite a large increase in Québec's per-student spending, per capita GDP also rose significantly. During this period, Québec's student enrollments also dropped. Elsewhere in Canada, per-student spending rose at a slower rate than per capita GDP and this in large part explains why the GDP allocated to elementary and secondary education decreased in the other provinces. In the United States, spending on public elementary and secondary education in relation to GDP fluctuated a little during this period, but remained above 4.0%.

When the share of Québec's GDP spent on elementary and secondary education is compared with that of the OECD countries in 2006, Québec ranked slightly below the average for the OECD countries considered.[3] This can be explained primarily by the organizational differences between education systems. For example, preschool services are more extensive in many OECD countries (children are admitted at the age of three) than in Québec, and the duration of elementary and secondary education in Québec is shorter than in the rest of the world.[4]

Between 2004 and 2008, Québec's share of GDP spent in school boards increased from 3.5% to 3.7%, while this share decreased somewhat in the rest of Canada. In the United States, the share of GDP allocated to public elementary and secondary education remained relatively stable and stood at 4.2% in 2008-2009. The increase in the financial outlay in Québec can be explained mainly by the strong growth in per-student spending in the school boards during this period (in current dollars and in constant dollars).[5]

In 2008-2009, Québec spent a larger share of its GDP in school boards than the rest of Canada.

1. *In 2008-2009, Québec spent $11.1 billion of its $301.5-billion GDP in school boards. The concept of total spending used in this section is defined at the bottom of Table 1.6.*
2. *The duration of elementary and secondary education is 11 years in Québec and normally 12 years in the other regions considered. The private school system is also more developed in Québec than elsewhere in Canada.*
3. *See Marius Demers, "Educational Spending Relative to the Gross Domestic Product (GDP) in 2004. A comparison of Québec and the OECD Countries,"* Education Statistics Bulletin 35 *(December 2007). This document, which was published by the MELS Direction de la recherche, des statistiques et de l'information, is available at:* http://www.mels.gouv.qc.ca/sections/publications/index.asp?page=bullStatEducation. *An update is available for 2006.*
4. *Québec's college network also has unique characteristics (including the mandatory two years of college before entering university). This compensates for the shorter duration of elementary and secondary education in Québec.*
5. *See Section 1.7.*

Table 1.6
Total school board spending[1] in relation to GDP: Québec, the other regions of Canada, and the United States (%)

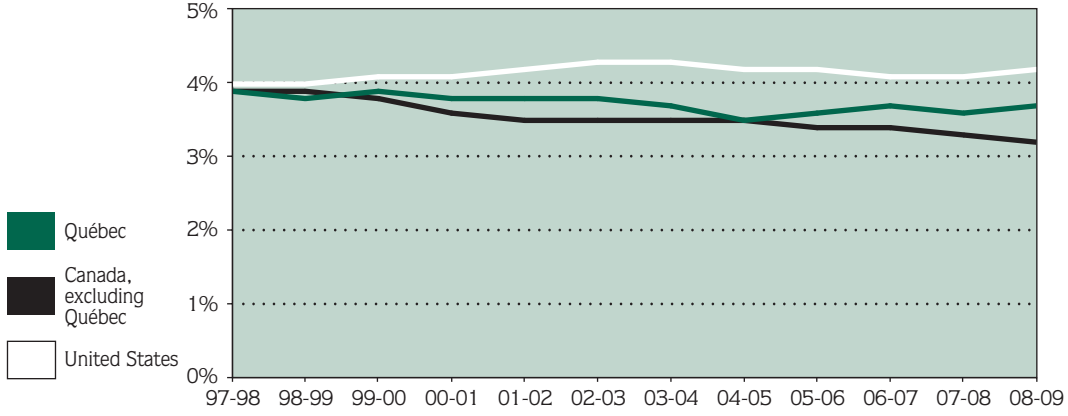
	1997-1998	2000-2001	2002-2003	2004-2005	2006-2007	2008-2009[e]
Québec	**3.9**	**3.8**	**3.8**	**3.5**	**3.7**	**3.7**
Canada, excluding Québec	**3.9**	**3.6**	**3.5**	**3.5**	**3.4**	**3.2**
Atlantic Provinces	4.8	4.7	4.1	3.9	3.7	3.6
Ontario	4.0	3.6	3.4	3.6	3.7	3.6
Western Canada	3.5	3.3	3.5	3.2	2.9	2.6
Canada	**3.9**	**3.6**	**3.6**	**3.5**	**3.4**	**3.3**
United States	**4.0**	**4.1**	**4.3**	**4.2**	**4.1**	**4.2**

Sources: The basic data used to calculate this indicator were obtained from Statistics Canada, CAUBO and the National Center for Education Statistics (U.S. Department of Education).

e: Estimates made by the DRSI of MELS

1. Total spending includes operating and capital expenses, direct government contributions to school board employee pension plans and interest on the debt service (but not repayment of principal). This concept of spending has been defined by Statistics Canada and figures on spending for 1997 to 2006 are taken from Statistics Canada's Elementary-Secondary Education Statistics Project (ESESP), which data compiled by the Ministère de l'Éducation, du Loisir et du Sport. Also see Note 1 at the bottom of the text.

Graph 1.6
Total school board spending in relation to GDP: Québec, Canada excluding Québec, and the United States (%)



1.7 Total School Board Spending in Current and Constant Dollars

In 2008-2009, total school board spending in Québec was estimated at $11.1 billion, student enrollments at slightly less than one million, and per-student spending in current dollars at $11 093.[1]

Spending can also be expressed in constant dollars, so as to factor in the rise in the price of goods and services used to provide educational services.[2] Previous editions of the *Education Indicators* showed that, in the 1980s, growth rates in school board spending (in current and constant dollars) were considerably reduced with respect to what had been seen in the 1970s. A lower inflation rate, salary restrictions and generally more conservative budget policies considerably curbed the rapid rise in school board spending. In the 1990s, there was a downward trend in per-student spending in constant dollars. This decrease can be explained by budget cutbacks and the application of cost-cutting measures in Québec school boards. The introduction of full-time kindergarten in Québec school boards in 1997-1998 also contributed to the drop in per-student spending.[3]

Between 1998 and 2002, there was a 26% increase in per-student spending in current dollars and a 16% increase in constant dollars. These increases can be explained for the most part by the agreements concluded in April 2000 between the Québec government and the unions regarding the new salary structure for teachers, by the coming into force of a new collective agreement, by support measures for school boards (additional funding for childcare services, [4] the implementation of the education reform, the adoption of the policy on special education, teacher training and the hiring of technicians for the development of information technologies, support for disadvantaged areas, payment of allowances to decrease the fees payable by parents, etc.) and, more generally, by the sums reinvested by the government in education.[5]

Between 2002 and 2004, per-student spending in constant dollars remained relatively stable. This can be explained in part by the fact that the salaries of school board personnel were frozen during this period.[6]

Between 2004 and 2008, per-student spending increased by 27% in current dollars and by 18% in constant dollars. These increases can largely be explained by new reinvestment and development measures (programs to reduce the dropout rate; smaller classes in preschool and Elementary Cycle One; increased teaching time at the elementary level; support for at-risk students or students with special needs;[7] the *Plan d'action éducation, emploi et productivité* in vocational and technical training and adult education, etc.).

These school board support measures also resulted in a decrease in the average number of students per teacher, which dropped from 15.7 in 2004-2005 to 14.5 in 2008-2009. This factor contributed significantly to the increase in per-student spending.[8]

Between 2004 and 2008, per student spending increased by 18% in constant dollars.

1. *See Note 1 at the bottom of Table 1.7. The concept of spending is the same as that used in Section 1.8.*
2. *The consumer price index (CPI) is used to express spending in constant dollars. Editions of the* Education Indicators *prior to 2005 used the school boards' education price index.*
3. *The introduction of full-time kindergarten resulted in an increase in the "relative weight" of a relatively inexpensive sector of enrollments.*
4. *Following a policy limiting the financial contribution of parents to $5 for each child enrolled on a regular basis in child-care services. In 2003, this amount rose to $7 per day.*
5. *For example, more money for "other expenses" in order to increase the amount of resources other than those related to personnel.*
6. *The Québec government adopted Bill 142, which defines the salary rates and scales for CEGEP personnel until 2010. Salaries were frozen in 2004 and 2005 and, on April 1 of 2006, 2007, 2008 and 2009, the Bill provides for a 2% salary increase.*
7. *For example, significant amounts were paid out for the* Agir tôt pour réussir program, *which recognizes the need for early intervention at the first sign of difficulty, as well as the need to adapt services to students' needs.*
8. *See Section 1.9.*

Table 1.7
Total school board spending[1]

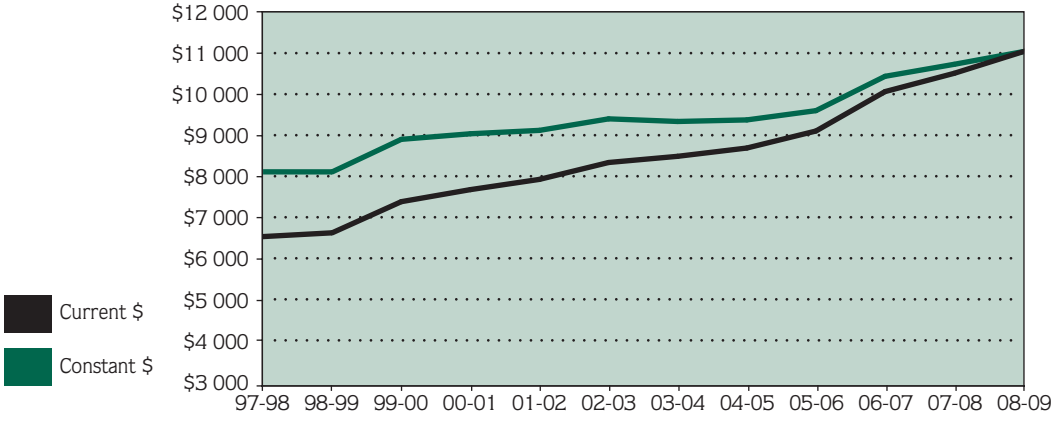
	1998-1999	2000-2001	2002-2003	2004-2005	2006-2007	2008-2009[e]
Total spending (in millions of dollars)						
In current dollars	7 446.9	8 454.9	9 095.4	9 325.6	10 480.3	11 079.2
In constant 2008-2009[2] dollars	9 106.0	9 946.9	10 250.7	10 057.8	10 866.0	11 079.2
Spending per student ($)						
In current dollars	6 671	7 725	8 387	8 740	10 117	11 093
In constant 2008-2009[2] dollars	8 158	9 088	9 452	9 426	10 490	11 093

Sources: The basic data used to calculate this indicator were obtained from various MELS information systems and from Statistics Canada.

e: Estimates made by the DRSI of MELS

1. *Total spending includes operating and capital expenses, direct government contributions to school board employee pension plans and interest on the debt service (but not repayment of principal). This concept was defined by Statistics Canada and figures on spending for 1997 to 2006 were taken from Statistic Canada's* Elementary-Secondary Education Statistics Project—ESESP, *which includes data compiled by the Ministère de l'Éducation, du Loisir et du Sport. The concept of spending in this section is the same as that used in Section 1.8.*
2. *See Note 2 at the bottom of the text.*

Graph 1.7
Total school board spending per student in current dollars and in constant 2008-2009 dollars



1.8 Comparison of Total School Board Spending per Student

In 2008-2009, total spending per student[1] by Québec school boards was $11 093, compared with the Atlantic Provinces at $10 721, Ontario at $10 850 and Western Canada at $11 250. In the United States, per-student spending was $15 203.[2]

Previous editions of the *Education Indicators* showed that in the 1970s spending per student rose more rapidly in Québec than in the rest of Canada and the United States. In the 1980s, a reversal occurred: per-student spending rose more slowly in Québec than in the rest of Canada and the United States. In Québec, the slower growth in spending was a result of salary-restriction measures applied to school board employees.

In the 1990s, per-student spending varied in Canada and, at the beginning of the next decade, it was slightly higher in Québec than the Canadian average. However, starting in 2003-2004, per-student spending was lower in Québec than in the rest of Canada until 2007-2008.

In 2008-2009, per-student spending was more or less the same in Québec ($11 093) as the average for the rest of Canada ($11 031). However, when the individual factors making up total spending per student are compared, it appears that some factors are higher in Québec than in the rest of Canada, while others are lower. Salaries for school personnel[3] and capital expenses are lower in Québec than in the rest of Canada, while student-teacher ratios,[4] vocational training, childcare services and school transportation are more expensive in Québec school boards than in the rest of Canada.

It should be noted, however, that the comparison of per-student spending in the different provinces does not take into account regional differences in terms of the cost of living, which is lower in Québec than the average for the rest of Canada (about 7.5% in 2008-2009). If the data were adjusted to take the cost of living into account, per-student spending would be 8% higher in Québec than in the rest of Canada (in real terms).

In 2008-2009, total school board spending per student in Québec was similar to the Canadian average.

1. *See Note 1 at the bottom of Table 1.8. The concept of operating expenditures is the same as that in Section 1.7.*
2. *For the purposes of this comparison, per-student spending in the United States is expressed in Canadian dollars. American dollars are converted to Canadian dollars using the purchasing power parity rates (PPP) set by the OECD. "Purchasing Power Parities (PPPs) are the rates of currency conversion that equalize the purchasing power of different currencies. This means that a given sum of money, when converted into different currencies at the PPP rates, will buy the same basket of goods and services in all countries. Thus, PPPs are the rates of currency conversion which eliminate differences in price levels between countries." (OECD, National Accounts).*
3. *See Section 1.10 for a comparison of salaries for school personnel.*
4. *See Section 1.9.*

Table 1.8

Total school board spending per student:[1] Québec, the other regions of Canada, and the United States (in current dollars)[2]

	1998-1999	2000-2001	2002-2003	2004-2005	2006-2007	2008-2009[e]
Québec	**6 677**	**7 734**	**8 398**	**8 755**	**10 137**	**11 093**
Canada, excluding Québec	**7 193**	**7 686**	**8 202**	**9 228**	**10 340**	**11 031**
Atlantic Provinces	5 957	7 436	7 414	8 189	9 432	10 721
Ontario	7 559	7 753	8 028	9 326	10 376	10 850
Western Canada	6 985	7 660	8 570	9 271	10 406	11 250
Canada	**7 079**	**7 696**	**8 244**	**9 126**	**10 297**	**11 047**
United States	**9 340**	**10 970**	**11 894**	**12 881**	**13 963**	**15 203**

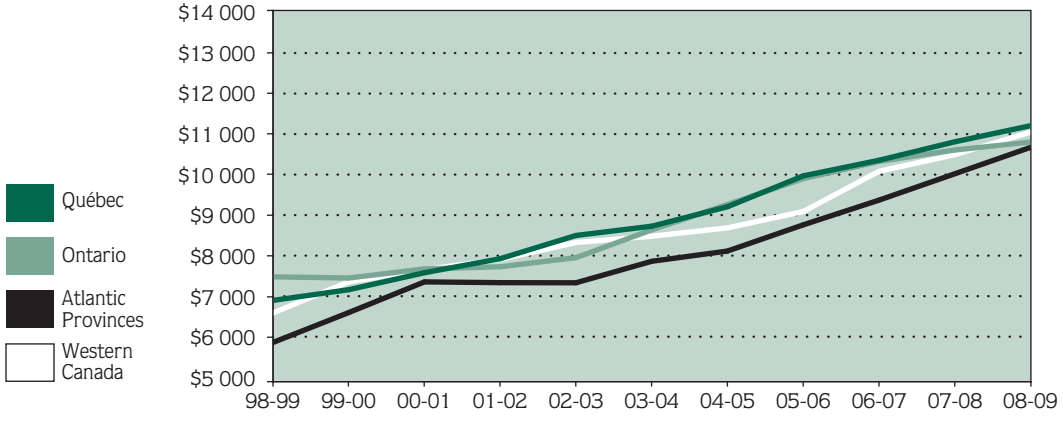
Sources: The basic data used to calculate this indicator were obtained from Statistics Canada and the National Center for Education Statistics (U.S. Department of Education).

e: Estimates made by the DRSI of MELS

1. *Total spending includes operating and capital expenses, direct government contributions to school board employee pension plans and interest on the debt service (but not repayment of principal). This concept of spending was defined by Statistics Canada and figures for 1997 to 2006 were taken from Statistics Canada's* Elementary-Secondary Education Statistics Project—ESESP, *which includes data compiled by the Ministère de l'Éducation, du Loisir et du Sport. The concept of spending in this section is the same as that used in Section 1.7.*
2. *See Note 2 at the bottom of the text.*

Graph 1.8

Total school board spending per student: Québec and the other regions of Canada (in current dollars)



1.9 Student-Teacher Ratio in School Boards

In 2008-2009, the average number of students per teacher in school boards was estimated at 14.5 in Québec. The student-teacher ratio is calculated by dividing the number of students by the number of teachers in the school boards. Data on enrollments and teaching personnel is expressed in full-time equivalents. The ratio therefore does not indicate the average number of students per class. To understand the difference between these two ratios, the student-teacher ratio must be considered as a composite indicator that is the result of three variables: the average number of students per class, the average teaching time of teachers and the average instruction time for students.

In 2008-2009, the student-teacher ratio in the United States was estimated at 15.0. A comparison of Québec with the United States as a whole reveals that the student-teacher ratio was higher in 22 U.S. states[1] and lower in 29 states.

The data available for the other provinces refer to a broader concept of personnel. In addition to teachers, educators also include school administrators and nonteaching professionals who work with students (e.g. education consultants and guidance counsellors). Table 1.9b contains data on the student-educator ratio.[2] In 2007-2008 (the most recent year available for interprovincial comparisons), this ratio was lower in Québec (13.3) than in the Atlantic Provinces (13.4), Ontario (14.0) and Western Canada (16.2). The lower number of students per educator in Québec than in Ontario is largely due to the average teaching time of teachers and class size, which are lower in Québec. For example, the average teaching time of teachers in Québec was 615 hours per year at the secondary level, while that of their counterparts in Ontario was 740 hours in 2007-2008.

In previous editions of the *Education Indicators*, it was indicated that in the 1990s, the student-educator ratio in Québec and in the rest of Canada was on the rise, particularly in Ontario. The increase in Ontario was due to job cuts resulting from the application of the 1993 Social Contract legislation. One of the objectives of this legislation was to reduce the number of teachers in school boards. There were also budget cutbacks in Québec in the 1990s, but they affected mostly salaries. It should also be noted that, in their contract negotiations, Québec unions have always given priority to employment levels and job descriptions.

However, since the later 1990s, this trend was reversed in Québec and in the rest of Canada. Between 1997-1998 and 2007-2008, the student-educator ratio in Québec school boards dropped from 15.2 to 13.3. This decrease is partly due to various measures implemented by the Ministère de l'Éducation, du Loisir et du Sport in recent years to support academic success for all students. For example, the number of students per group in Elementary Cycle One was reduced, and schools in disadvantaged communities benefited from further reductions.[3] The teaching time at the elementary level also increased by 90 minutes (from 23.5 to 25.0 hours per week), which necessitated the hiring of specialists to teach English as a Second Language starting in the first year of elementary school, the Physical Education and Health program, and the arts. Lastly, resource persons were hired to provide support for at-risk students and students with special needs.

The average number of students per teacher in Québec dropped from 16.5 in 1997-1998 to 14.5 in 2008-2009.

1. *Including the District of Columbia*
2. *Data on the student-teacher ratio are taken from an annual survey conducted by Statistics Canada among all Canadian provinces (*Elementary-Secondary Education Statistics Project–ESESP*). The Ministère de l'Éducation, du Loisir et du Sport participates in this survey.*
3. *The average number of students per group was reduced from 23 to 20 for the first year of Elementary Cycle One and from 25 to 22 for the second year in regular classes. In schools in disadvantaged communities, the average number of students per group was reduced to 18 for both years of Cycle One.*

Table 1.9a
Student-teacher ratio in school boards: Québec and the United States

	1997-1998	2000-2001	2004-2005	2006-2007	2007-2008	2008-2009[e]
Québec	16.5	16.0	15.7	14.9	14.6	14.5
United States	16.3	15.7	15.4	15.2	15.1	15.0

Table 1.9b
Student-educator ratio[1] in school boards: Québec and the other regions of Canada

	1997-1998	2000-2001	2004-2005	2006-2007	2007-2008	2008-2009[e]
Québec	**15.2**	**14.6**	**14.2**	**13.5**	**13.3**	**13.0**
Canada, excluding Québec	**N/A**	**16.3**	**15.9**	**15.0**	**14.7**	**N/A**
Atlantic Provinces	16.5	15.8	15.0	14.1	13.4	N/A
Ontario	N/A	15.9	15.6	14.5	14.0	N/A
Western Canada	17.6	17.0	16.6	16.1	16.2	N/A
Canada	**N/A**	**15.9**	**15.5**	**14.7**	**14.4**	**N/A**

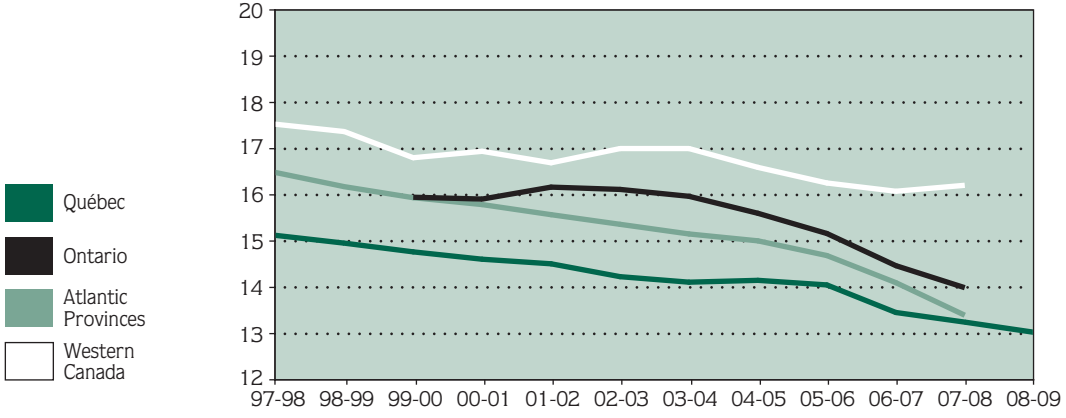
Source: The basic data used to calculate this indicator were obtained from various MELS information systems, Statistics Canada and the National Center for Education Statistics (U.S. Department of Education).

e: Estimates made by the DRSI of MELS

1. See definition in the text.

N/A: Data not available

Graph 1.9
Student-educator ratio in school boards: Québec and the other regions of Canada



1.10 Average Salary of Teachers in School Boards

In Québec, the basic salary of teachers in school boards is based on their schooling and work experience. There are 17 steps in the salary scale and a new teacher with a bachelor's degree enters at the third step (starting salary of $39 179 in 2008-2009).[1] The maximum salary on the scale was $70 352, while the average salary was $57 821.[2]

In the United States, the average salary of teachers was $66 309.[3] A comparison of Québec with the United States as a whole for 2006-2007 reveals 37 U.S. states[4] where the average salary of teachers was higher than in Québec and 14 states where it was lower.[5]

The data available for the other provinces refer to a broader concept of personnel. In addition to teachers, educators also include school administrators and nonteaching professionals who work with students (e.g. education consultants and guidance counsellors).[6] Table 1.10b contains data on the average salary of educators. In 2007-2008, the average salary of educators in Québec was lower than in the rest of Canada.

Throughout most of the 1990s, the average salary of educators increased more slowly in Québec than in the rest of Canada. In Québec, in a battle against budget deficits, agreements between the government and unions have resulted in the average salary of teachers rising very little. Also, in 1997, a vast program of voluntary retirement resulted in a younger average age of teachers in Québec and, consequently, a decrease in the average salary because of less seniority.[7]

Between 2000-2001 and 2007-2008, the increase in the average salary of educators in Québec (18.1%) was lower than in the rest of Canada (26.6%). In 2007-2008, the average salary of teachers in Québec ($58 430) was still lower than that of their counterparts in the rest of Canada ($72 474), a difference of 19.0%. It must be noted, however, that relative wealth (measured in terms of per capita GDP) and the cost of living are both lower in Québec than in the rest of Canada.

The salaries of teachers in Québec school boards can be compared with that of the member countries of the Organisation for Economic Co-operation and Development (OECD) using indicators such as starting salary, salary after 15 years of seniority and maximum salary.[8] Overall, in 2006-2007, the starting salary and maximum salary of teachers in Québec school boards were lower than the adjusted average for the OECD countries.[9] However, the salary of teachers after 15 years of seniority was higher in Québec. This is mainly due to the fact that teachers in Québec reach the maximum salary scale their 15th year of recognized experience, whereas in the OECD countries considered, the maximum salary is reached on average after 23 years.

Teachers in Québec earn less than teachers in neighbouring regions, although the cost of living in Québec is lower as well.

1. *Data on starting and maximum salaries are taken from the salary scale in effect as at April 1, 2009.*
2. *This is the average salary for all categories of teachers (full-time, part-time, teachers-by-the-lesson, supply teachers, etc.). The average salary of regular full-time teachers was $62 500 in 2008-2009.*
3. *The average salary of American teachers was determined on the basis of data from the National Education Association; these data were then converted into Canadian dollars using the purchasing power parity rates (PPP) set by the OECD (see Note 2 in Section 1.8). However, it should be noted that because the cost of living is lower in Québec than in the rest of Canada, use of the PPP to convert the salaries of American teachers into Canadian dollars overestimates the difference in salaries between American and Québec teachers.*
4. *Including the District of Columbia*
5. *See Note 3.*
6. *Data on the student-teacher ratio were taken from an annual survey conducted by Statistics Canada among all Canadian provinces (*Elementary-Secondary Education Statistics Project–ESESP*). The Ministère de l'Éducation, du Loisir et du Sport participates in this survey.*
7. *In Québec, the basic salary of teachers in school boards is determined by collective agreements.*
8. *See Marius Demers, "Cost of Statutory Salaries of Teachers per Student for Elementary and Secondary School Levels in 2004-2005. A comparison of Québec and OECD Countries,"* Education Statistics Bulletin 36 *(March 2008). This document, which was published by the MELS Direction de la recherche, des statistiques et de l'information, is available at* http://www.mels.gouv.qc.ca/sections/publications/index.asp?page=bullStatEducation. *An update is available for 2006-2007.*
9. *Certain countries, such as Mexico and Turkey, were excluded from the comparison because of their relatively low collective wealth (as measured by the per capita GDP).*

Table 1.10a
Average salary of teachers in school boards: Québec and the United States (in current dollars[1])

	1997-1998	2000-2001	2004-2005	2006-2007	2007-2008	2008-2009[e]
Québec	41 595	46 992	51 317	53 833	56 131	57 821
United States	47 614	53 355	58 445	61 417	63 293	66 309

Table 1.10b
Average salary of educators[2] in school boards: Québec and the other regions of Canada (in current dollars)

	1997-1998	2000-2001	2004-2005	2006-2007	2007-2008	2008-2009
Québec	**43 446**	**49 479**	**53 621**	**57 605**	**58 430**	**60 182**
Canada, excluding Québec	**N/A**	**57 237**	**67 196**	**70 236**	**72 474**	**N/A**
Atlantic Provinces	48 130	50 555	60 060	59 574	60 879	N/A
Ontario	N/A	59 429	69 101	71 350	72 473	N/A
Western Canada	53 097	56 150	65 993	70 938	75 202	N/A
Canada	**N/A**	**55 406**	**63 979**	**67 293**	**69 222**	**N/A**

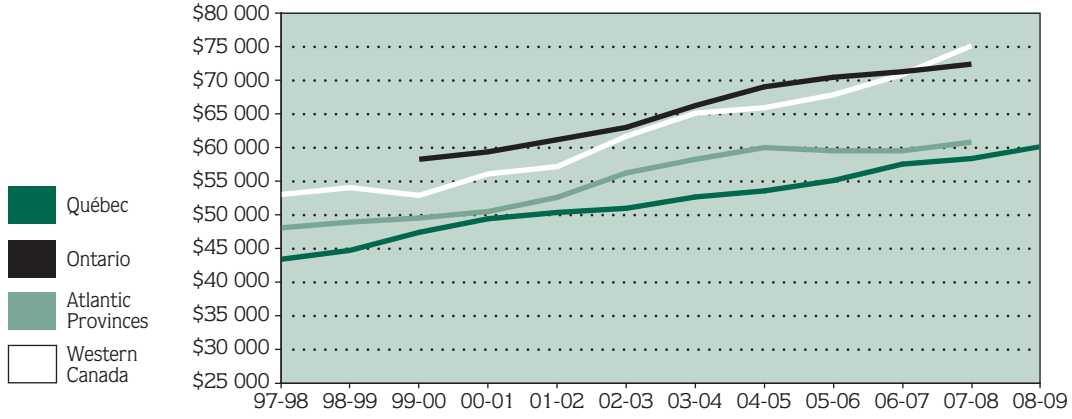
Sources: The basic data used to calculate these indicators were obtained from various MELS information systems, Statistics Canada and the National Center for Education Statistics (U.S. Department of Education).

e: Estimates made by the DRSI of MELS (for the United States) *N/A: Data not available*

1. See Note 3 at the bottom of the text.

2. See definition in the text.

Graph 1.10
Average salary of educators in school boards: Québec and the other regions of Canada (in current dollars)



1.11 CEGEP Operating Expenses for Regular Education

In 2008-2009, CEGEP operating expenses for regular education were estimated at approximately $1.5 billion, a 7% increase over the previous year. This increase can be explained by higher enrollments, but also by an increase in resources allocated to CEGEPs.

Previous editions of the *Education Indicators* showed that CEGEP operating expenses grew more slowly in the 1980s and 1990s than in the 1970s. This was a result of a slowdown in the inflation rate, as well as budget cutbacks and the application of cost-cutting measures in CEGEPs.

Between 1998-1999 and 2003-2004, there was a 32% increase in per-student spending in current dollars and a 19% increase in constant dollars. These increases were due primarily to new collective agreements for all CEGEP employees and support measures for CEGEPs (for the development of new information technologies, for careers in science, for success measures, etc.).

Between 2003-2004 and 2008-2009, there was a slight decrease followed by a rise in per-student spending in constant dollars. The decrease can be explained in part by a freeze in the salaries of CEGEP employees during this period (in 2004 and in 2005).[1] However, the rise is due to various government reinvestment measures in higher education. Thus, the Ministère de l'Éducation, du Loisir et du Sport increased the annual resources allocated to CEGEPs to promote student retention and foster student success.

Per-student spending in CEGEPs was therefore $9 761 (in current dollars) in 2008-2009. This amount is an average for all types of regular education programs: per-student spending on pre-university programs was $7 761, while that on technical programs was $11 644. The higher estimated cost of technical training (50% more) is due primarily to the higher cost of personnel and the use of more costly equipment. The higher cost of personnel is attributable for the most part to the fact that the average number of students per teacher is far lower in technical training than in general education.

In 2008-2009, 94% of CEGEP operating expenses for regular education was provided by the Québec government. This percentage is much higher than the corresponding percentage for community colleges in the other provinces. This is because college is free in Québec, while students attending community colleges in the other provinces must generally pay tuition.[2] In Ontario, for example, students in regular programs pay annual tuition fees of approximately $2 000.[3]

CEGEP operating expenses have increased 7% between 2007-2008 and 2008-2009.

1. *The Québec government adopted Bill 142, which defines the salary rates and scales for CEGEP personnel until 2010. Salaries were frozen in 2004 and 2005 and, on April 1 of 2006, 2007, 2008 and 2009, the Bill provided for a 2% salary increase.*
2. *Québec CEGEP students (in regular education) do not pay tuition. There are, however, certain mandatory expenses, and students must pay for their textbooks and other supplies.*
3. *Tuition fees for some programs are higher (14% of students pay between $2 000 and $6 000, while less than 1% pay between $6 000 and $11 000). These figures are for 2003-2004. Source: Bob Rae,* Ontario: A Leader in Learning—Report and Recommendations, *February 2005.*

Table 1.11
CEGEP operating expenses[1] for regular education

	1998-1999	2000-2001	2003-2004	2005-2006	2007-2008	2008-2009[e]
Total spending in current dollars (in millions of dollars)	1 035.7	1 134.6	1 258.8	1 284.6	1 410.2	1 511.4
Per-student spending in current dollars	6 688	7 633	8 818	9 085	9 422	9 761
Per-student spending in constant 2008-20092 dollars	8 177	8 979	9 695	9 578	9 618	9 761

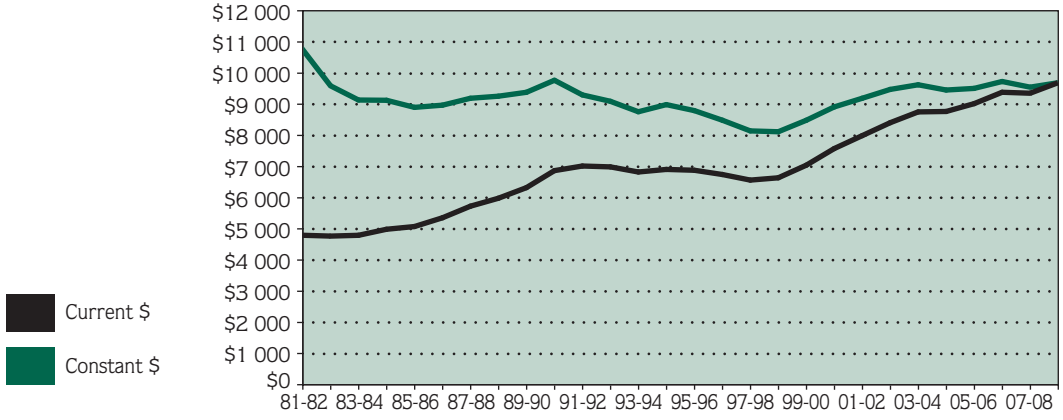
Sources: The basic data used to calculate these indicators were obtained from various MELS information systems and from Statistics Canada.

e: Estimates made by the DRSI of MELS

1. Operating expenses exclude debt service (long-term and current liabilities) and capital expenses financed directly from current revenues.

2. See Note 2 at the bottom of the text.

Graph 1.11
CEGEP operating expenses per student in current dollars and in constant 2008-2009 dollars



1.12 Student-Teacher Ratio, Average Teacher Salary and Cost of Teachers per Student in CEGEPs

This section is a complement to Section 1.11, which analyzed changes in CEGEP operating expenditures. Salary costs for teachers accounted for more than half of total CEGEP operating expenses in 2008-2009, and the changes in these costs were a determining factor in the changes in operating expenses.[1] Two factors determine the cost of teachers per student:[2] the student-teacher ratio and the average salary of teachers in CEGEPs.

The student-teacher ratio is calculated by dividing the number of students by the number of teachers in CEGEPs.[3] The ratio therefore does not indicate the average number of students per class. To understand the difference between these two ratios, the student-teacher ratio must be considered as a composite indicator that is the result of three variables: the average number of students per class, the average teaching time of teachers and the average instruction time for students.

Previous editions of the *Education Indicators* revealed that the cost of teachers per student in constant dollars decreased during the 1980s and 1990s. This can be explained primarily by the fact that, due to budget cutbacks, the average salary of teachers increased more slowly than the rate of inflation. Cost-cutting measures were carried out as part of the budget cutbacks implemented by the Québec government during the1990s.

However, between 1998 and 2003, there was a 15% increase in the cost of teachers per student in constant dollars, primarily because of new collective agreements for all CEGEP employees and a decrease in the student-teacher ratio, from 13.8 in 1998-1999 to 12.3 in 2003-2004. However, the cost of teachers per student in constant dollars decreased slightly in subsequent years. This can be explained in large part by the fact that salaries were under-indexed during this period.[4]

In 2008-2009, the student-teacher ratio in CEGEPs was estimated at 12.6, while the average salary of teachers was $63 610. With regard to the student-teacher ratio, it would be interesting to have distinct data for the average number of students per teacher in pre-university education and in technical training. It is clear, however, that the average number of students per teacher is much lower in technical training than in general education.

In 2008-2009, the average number of students per teacher in CEGEPs was estimated at 12.6 and the average teacher's salary, at $63 610.

1. *The salary costs considered in this section do not include employee benefits. If these were included, salary costs for teachers would account for more than 60% of total CEGEP operating expenses.*
2. *The cost of teachers per student is calculated by dividing the total payroll for teachers by the number of students.*
3. *Data on enrollments are based on fall registration recognized for the purpose of estimating costs, and data on teaching personnel are expressed in full-time equivalents.*
4. *The Québec government adopted Bill 142, which defines the salary rates and scales for CEGEP personnel until 2010. Salaries were frozen in 2004 and 2005 and, on April 1 of 2006, 2007, 2008 and 2009, the Bill provided for a 2% salary increase.*

Table 1.12
Student-teacher ratio,[1] average salary of teachers and cost of teachers per student in CEGEPs

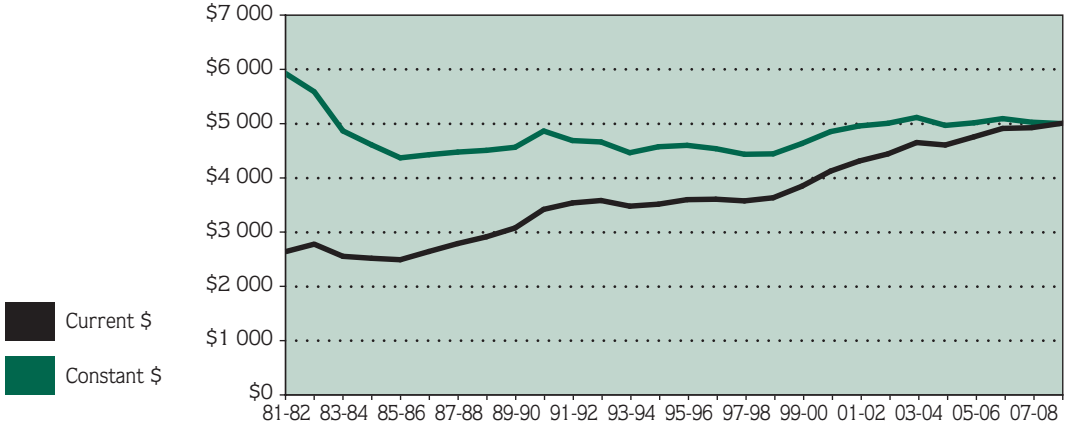
	1998-1999	2000-2001	2003-2004	2005-2006	2007-2008	2008-2009[e]
Student-teacher ratio	13.8	12.8	12.3	12.5	12.5	12.6
Average salary in current dollars	50 399	53 216	57 489	59 825	62 230	63 610
Cost of teachers per student						
In current dollars	3 659	4 154	4 684	4 790	4 959	5 037
In constant dollars (2008-2009)	4 474	4 887	5 150	5 050	5 062	5 037

Sources: The basic data used to calculate these indicators were obtained from various MELS information systems and from Statistics Canada

e: Estimates made by the DRSI of MELS

1. See Note 3 at the bottom of the text.

Graph 1.12
Cost of teachers per student in CEGEPs in current dollars and in constant 2008-2009 dollars



1.13 Total University Spending in Relation to GDP

In 2008-2009, an estimated 1.96% of the gross domestic product (GDP) was allocated to university education in Québec,[1] compared with 2.03% in the Atlantic Provinces, 1.75% in Ontario and 1.34% in Western Canada.[2]

Between 1997 and 2004, the share of GDP allocated to university education increased both in Québec and in the rest of Canada but decreased in the following years. In 2008-2009, investment in university education remained higher in Québec than in the rest of Canada. To explain why Québec invested more of its GDP in university education, it is necessary to consider the following four factors: per-student spending; the collective wealth (as defined by per capita GDP); the labour force participation rate (the proportion of the student population with respect to the population aged 18 to 24) and the demographic factor (the proportion of 18-to-24-year-olds with respect to the total population). Two of these four factors contributed to greater spending in Québec: the slightly higher per-student spending in Québec than in the rest of Canada and the fact that collective wealth is lower in Québec. The demographic factor (relatively fewer young people in Québec) had the opposite effect.[3] The participation rate had no significant effect (there were no great differences in participation rates in 2008-2009).

In 2008-2009, total per-student spending in Québec universities ($29 941) was 6.0% higher than in universities in the rest of Canada ($28 314).[4]

The fact that Québec's per capita GDP ($38 979) was 23.0% lower with respect to the average for the other Canadian provinces ($50 749) is the key factor explaining why investment in university education is higher in Québec. The participation rate in Québec (28.8%) was more or less the same as in the rest of Canada (28.6%) in 2008-2009

When compared with the member countries of the Organisation for Economic Co-operation and Development (OECD), Québec ranks among the countries with the largest share of its GDP allocated to university education in 2006.[5] In fact, only the United States and Korea allocated a larger share of their GDP to university education. This can be explained primarily by the fact that the costs of university education are relatively higher in Québec than the OECD average. Thus, it is estimated that per-student spending for Québec universities was well above the average for OECD countries. In addition, the schooling rate of young people is estimated to be higher in Québec than on average in OECD countries, and this factor contributed to the larger investment in university education.

Investment in university education is higher in Québec than in the rest of Canada and in most OECD countries.

1. *In 2008-2009, Québec spent $5.9 billion of its $301.5-billion GDP on university education.*
2. *The data on universities presented here have not been adjusted to take into account the organizational differences in the education systems.*
3. *See Marius Demers, "Financial Investment in Universities in 2006-2007: Comparison between Québec and the Other Canadian Provinces,"* Education Statistics Bulletin 37 *(August 2008). This document, which was published by the MELS Direction de la recherche, des statistiques et de l'information, is available at:* http://www.mels.gouv.qc.ca/sections/publications/index.asp?page=bullStatEducation. *An update will be published as soon as real financial data for 2008-2009 are available.*
4. *See Section 1.14.*
5. *For more information on comparisons between Québec and OECD countries, see Marius Demers, "Educational Spending Relative to the Gross Domestic Product (GDP) in 2004. A comparison of Québec and the OECD Countries,"* Education Statistics Bulletin 35 *(December 2007). This document, which was published by the MELS Direction de la recherche, des statistiques et de l'information, is available at:* http://www.mels.gouv.qc.ca/sections/publications/index.asp?page=bullStatEducation. *An update is available for 2006.*

Table 1.13
Total spending allocated to university education[1] in relation to GDP: Québec and the other regions of Canada (%)

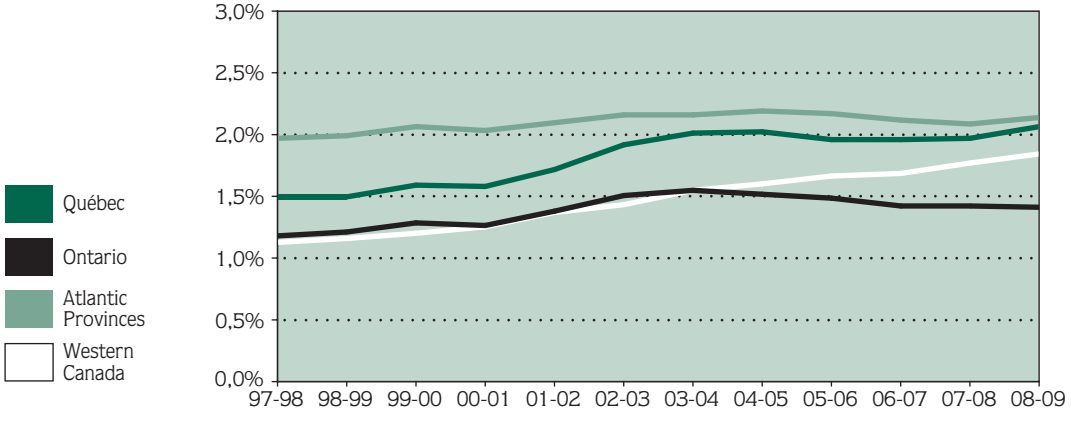
	1997-1998	2000-2001	2002-2003	2004-2005	2006-2007	2008-2009[e]
Québec	**1.42**	**1.50**	**1.82**	**1.92**	**1.86**	**1.96**
Canada excluding Québec	**1.14**	**1.24**	**1.43**	**1.52**	**1.51**	**1.57**
Atlantic Provinces	1.87	1.93	2.05	2.08	2.01	2.03
Ontario	1.07	1.19	1.36	1.52	1.60	1.75
Western Canada	1.12	1.20	1.43	1.44	1.35	1.34
Canada	**1.20**	**1.29**	**1.51**	**1.60**	**1.58**	**1.64**

Sources: The basic data used to calculate this indicator were obtained from Statistics Canada and CAUBO, among others.

e: Estimates made by the DRSI of MELS

1. Total university spending includes the general operating fund, endowment fund, research fund and capital fund. Also see Note 2 in the text.

Graph 1.13
Total university spending in relation to GDP: Québec and the other regions of Canada (%)



1.14 Total Per-Student University Spending

In 2008-2009, total spending per student by Québec universities was estimated at $29 941, compared with $25 150 in the Atlantic Provinces, $25 763 in Ontario and $33 563 in Western Canada.

Because of problems inherent in the comparison of these data, it is preferable to use the concept of total spending. Total university spending includes the general operating fund, the endowment fund, the research fund and the capital fund. This comparison must nonetheless be qualified by two important factors: organizational differences among education systems and differences in the cost of living.

The difference between total per-student spending by the provinces can be explained in part by the organizational differences among education systems, including those related to the composition of the student body according to level and field of study. Thus, because Québec universities have a higher proportion of students in costlier fields of study and higher levels of study explains in part why their per-student spending is higher than in Ontario, for example.[1]

Furthermore, the cost of living is lower in Québec than in the rest of Canada. In fact, in 2008, the cost of living in Québec was about 7.5% lower than in the rest of Canada. It is important to take this factor into account when comparing financial data, since for the same dollar amount, buying power is not the same from one province to the next. The importance of this factor is illustrated by the fact that the average salary of full-time professors in Québec universities, estimated at $100 124 in 2007-2008, was 5% lower than that of their counterparts in the rest of Canada, which was estimated at $105 574 for the same period.[2] If differences in the cost of living are taken into account, it can be concluded that in reality, the buying power of full-time professors in Québec universities was 2% higher in 2007-2008 than that of professors in the other provinces.

Data in current dollars show that in 2008-2009, total spending per student by Québec universities ($29 941) was significantly higher than in Ontario ($25 763). This difference can be explained primarily by higher per-student spending in Québec on teaching personnel, administration, activities related to computers and communications, research and financing costs. Conversely, there is less spending in Québec than in Ontario on student services (including bursaries)[3], external relations and libraries.

In 2008-2009, the Québec government announced various reinvestment measures for postsecondary education, including giving educational institutions the increase in federal transfers for postsecondary education ($112.2 million for universities). Consequently, in 2008-2009, the subsidy of the Ministère de l'Éducation, du Loisir et du Sport to universities increased by 10%.

In addition to government reinvestment measures, universities are now able to take greater advantage of revenues from tuition fees (following the yearly increase in basic tuition fees for Québec resident and non-resident students and the partial deregulation of lump sum payments that foreign students are required to pay).

In 2008-2009, total spending per student by Québec universities was higher than the average in the rest of Canada.

1. *See Marius Demers, "Financial Investment in Universities in 2006-2007: Comparison between Québec and the Other Canadian Provinces,"* Education Statistics Bulletin 37 *(August 2008). This document, which was published by the MELS Direction de la recherche, des statistiques et de l'information, is available at: http://www.mels.gouv.qc.ca/sections/publications/index.asp?page=bullStatEducation. An update will be published as soon as actual financial data for 2008-2009 are available.*
2. *See Section 1.15.*
3. *Per-student spending in terms of bursaries is higher in Ontario universities because their tuition fees are higher than Québec's, and they are expected to give a portion back to the students in the form of bursaries.*

Table 1.14
Total university spending per student:[1] Québec and the other regions of Canada (in current dollars)

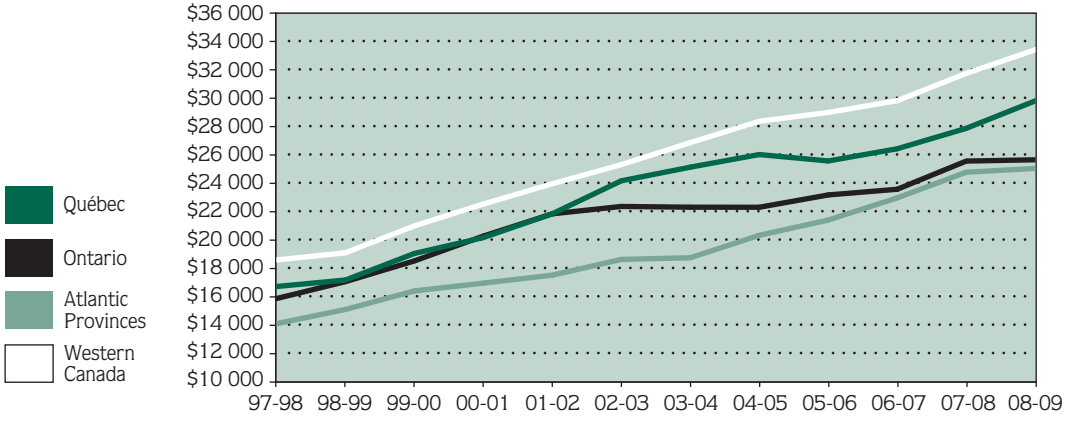
	1997-1998	2000-2001	2002-2003	2004-2005	2006-2007	2008-2009[e]
Québec	**16 771**	**20 248**	**24 273**	**26 136**	**26 546**	**29 941**
Canada, excluding Québec	**16 636**	**20 705**	**23 015**	**24 201**	**25 727**	**28 314**
Atlantic Provinces	14 136	17 015	18 697	20 406	23 064	25 150
Ontario	15 921	20 354	22 454	22 397	23 673	25 763
Western Provinces	18 655	22 626	25 419	28 497	29 957	33 563
Canada	**16 670**	**20 593**	**23 320**	**24 647**	**25 910**	**28 663**

Sources: The basic data used to calculate this indicator were obtained from Statistics Canada and CAUBO, among others.

e: Estimates made by the DRSI of MELS

1. Total university spending includes the general operating fund, endowment fund, research fund and capital fund. In addition, the calculation of per-student spending is based on a standard method for counting student enrollments in all provinces, as follows: part-time enrollments are divided by 3.5 to convert them into full-time equivalents, and are then added to the full-time enrollments.

Graph 1.14
Total university spending per student: Québec and the other regions of Canada (in current dollars)



1.15 Salary Costs of University Professors

Salary spending (including employee benefits) for all categories of personnel accounts for more than half of the total university spending in Québec and in the rest of Canada. Professors' salaries are the largest component of payroll expenditure. When the total payroll for professors is divided by the number of students expressed in full-time equivalents, the result is the cost of professors per student. In 2008-2009, this cost was higher in Québec ($7 584) than in the Atlantic Provinces ($7 240) and Ontario ($7 357), but lower than in Western Canada ($9 037).[1] The cost of professors per student in Québec is slightly below the average for the rest of Canada ($7 913).

The total payroll considered in the calculation of per-student spending for professors includes the salaries of deans, department heads, research professors and lecturers, as well as amounts paid to all other personnel employed in teaching positions (as defined by Statistics Canada). Of the factors that explain the differences observed in per-student spending for professors, two are particularly significant: the average number of students per professor and the average salary of professors. Table 1.15 presents data on the average salary of full-time professors.[2]

In 2007-2008, the average salary of professors in Québec ($100 124) was 8% higher than in the Atlantic Provinces ($92 291), but 7% lower than in Ontario ($107 734) and Western Canada ($107 752). However, it should be noted that the cost of living is lower in Québec than the average for the rest of Canada (about 7% lower in 2007-2008). If differences in the cost of living are taken into account, the average salary of professors appears to be slightly higher in Québec (approximately 2%) than in the rest of Canada.

It should also be noted that, although the average salary of professors in Québec was lower than in Ontario (by 7% in 2007-2008), the per-student cost of professors was still higher in Québec (by 3% in 2007-2008). This is primarily because the average number of students per professor was lower in Québec than in Ontario.

A study on financial investment in universities in 2006-2007 revealed that the average number of students per full-time professor in Québec (20.8) was clearly lower than in Ontario (24.9).[3] Lecturers and part-time professors are not included in the calculation. Lecturers are responsible for a large part of the teaching in university (slightly more than 50% in Québec). The data available do not permit a precise calculation of the student-teacher ratios, which would include all categories of teachers.

The large number of lecturers in Québec universities can be partly explained by the amount of time during which professors are released from their teaching duties in order to carry out other tasks (e.g. to do research, to hold administration positions related to academic affairs, to carry out internal service tasks).

Although the average salary of university professors is lower in Québec than in Ontario, the salary costs of professors per student is higher.

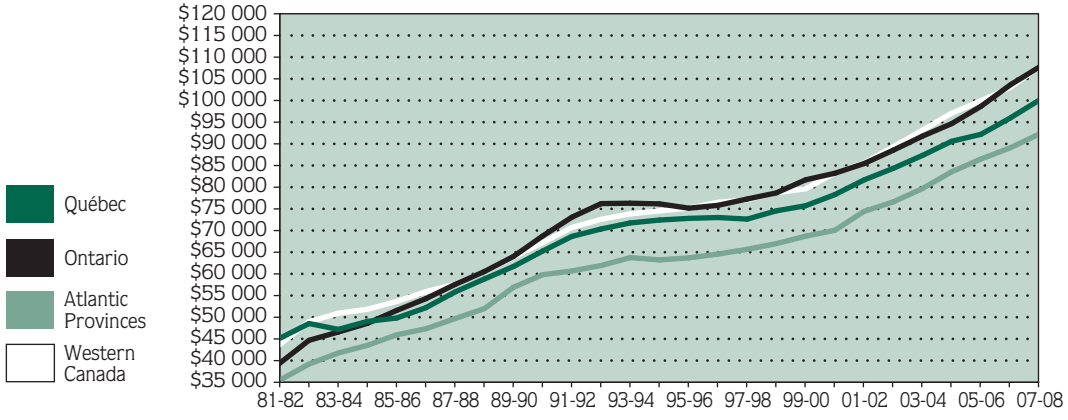
1. *Most recent actual data available. The calculation of per-student spending for professors is based on a standard method for counting student enrollments in all the provinces, as follows: part-time enrollments are divided by 3.5 to convert them into full-time equivalents and are then added to the full-time enrollments.*
2. *Employee benefits are not included in the total payroll used for this calculation.*
3. *Average salary includes basic salary as well as additional fees paid for administrative functions.*
4. *See Marius Demers, "Financial Investment in Universities in 2006-2007: Comparison between Québec and the Other Canadian Provinces,"* Education Statistics Bulletin 37 *(August 2008). This document, which was published by the MELS Direction de la recherche, des statistiques et de l'information, is available at:* http://www.mels.gouv.qc.ca/sections/publications/index.asp?page=bullStatEducation. *An update will be published as soon as actual financial data are available for 2008-2009.*

Table 1.15
Average salary of full-time university professors: Québec and the other regions of Canada (in current dollars)

	1990-1991	1995-1996	2000-2001	2004-2005	2006-2007	2007-2008
Québec	**65 284**	**72 820**	**78 300**	**90 609**	**95 962**	**100 124**
Canada, excluding Québec	**66 817**	**73 350**	**81 151**	**93 892**	**101 292**	**105 574**
Atlantic Provinces	59 826	63 705	70 067	83 566	89 084	92 291
Ontario	68 763	75 173	83 234	94 676	103 590	107 734
Western Canada	67 267	75 183	83 263	97 097	103 013	107 752
Canada	**66 464**	**73 216**	**80 467**	**93 121**	**100 056**	**104 321**

Source: The basic data used to calculate this indicator were obtained from Statistics Canada (except for the data for Québec in 2007-2008, which were taken from Enquête sur le personnel enseignant des universités québécoises—*EPE).*

Graph 1.15
Average salary of university research professors: Québec and the other regions of Canada (in current dollars)



1.16 Student Financial Assistance and Tuition Fees

In Québec, financial assistance is available to students in full-time postsecondary education and in secondary-level vocational training programs. The loans and bursaries awarded under Québec's student financial assistance program are intended to supplement the contribution of the student, his or her parents, sponsor or spouse—as responsibility for the cost of education lies with them first and foremost. Government assistance covers the difference between the allowable expenses and the contribution of the student and, where applicable, of his or her parents, sponsor or spouse.

In 2008-2009, 24.6% of full-time students in secondary vocational training, 22.2% of full-time college students and 39.4% of full-time university students received assistance. A total of 138 774 students benefited from the Loans and Bursaries Program. Of these, 50 956 received only a loan, 86 361 received a loan and a bursary, and 1 457 received only a bursary. A total of $483.6 million was granted in the form of loans and $368.0 million, in bursaries.

In 2008-2009, of the university students who received financial assistance, 34.3% obtained only a loan, which averaged $3 747, whereas 64.5% obtained a loan and a bursary totalling an average of $8 325. Those who received a loan and a bursary obtained on average slightly more than half of the assistance in the form of a bursary.

A look at the historical data on the breakdown of financial assistance awarded to Québec students attending university shows that the portion of assistance granted in the form of loans and bursaries fluctuated between 1990 and 2008 (Table 1.16b). In 2008-2009, loans accounted for 54.9% of the total assistance awarded, and bursaries, 45.1%.

In 2008-2009, upon completion of their undergraduate studies, Québec students who had received loans owed on average $13 022. The average debt for graduate studies was $16 304 and for postgraduate studies, $23 405.

Student loans contracted for college and undergraduate studies averaged $16 001 in 2008-2009; for college through to graduate studies, $23 487; and for college through to postgraduate studies, $32 111.

It is important to note that debt levels for Québec students are significantly lower than those for students in the rest of Canada. This can be explained in part by the fact that, on average, Québec awards more bursaries than the other provinces, as well as the fact that Québec's tuition fees are the lowest in Canada.

Tuition fees in Québec universities are set according to students' status. In addition to the basic amount payable by residents of Québec, Canadian students who are not residents of Québec and foreign students must pay an amount determined by the universities' budget rules. For example, tuition fees in Québec universities in 2009-2010 were $1 968 for Québec residents, $5 501 for Canadian students who are not Québec residents, and significantly higher for foreign students, which vary according to the field and level of studies.[1]

Table 1.16a presents data on the average tuition fees for Canadian students enrolled full-time in an undergraduate program, by region of Canada. In Québec, these fees ($2 272) represent 41% of the amount charged in the rest of Canada ($5 535) in 2009-2010. This situation can be explained by the long periods of time (1969 to 1989 and 1995 to 2006) during which tuitions fees were frozen in Québec universities.[2] In 2007, the Québec government announced that it was lifting the freeze on tuition fees for students residing in Québec. The fees will thus increase from $1 668 in 2006-2007 to $2 168 in 2011-2012.

In 2009-2010, average tuition fees were $2 272 in Québec and $5 535 in the rest of Canada.

1. *In addition to tuition fees, universities can charge foreign students special fees in accordance with their regulations. Moreover, various categories of students may be exempted from the amount normally payable by foreign students. See the following document, produced by the Direction des affaires internationales et canadiennes of the Ministère de l'Éducation, du Loisir et du Sport:* Politique relative aux droits de scolarité exigés des étudiantes et des étudiants étrangers par les universités du Québec, *May 2008. This document is available at:* http://www.mels.gouv.qc.ca/ens-sup/ens-univ/Politique_etudiant_etranger-2008.pdf.
2. *See Note 1 at the bottom of the tables.*

Table 1.16a
Average tuition fees for full-time Canadian undergraduate university students: Québec and the other regions of Canada (in current dollars)

	1989-1990	1991-1992	1996-1997	2002-2003	2008-2009[p]	2009-2010[p]
Québec[1]	**519**	**1 311**	**1 705**	**1 852**	**2 180**	**2 272**
Canada, excluding Québec	**1 537**	**1 842**	**2 939**	**4 253**	**5 329**	**5 535**
Atlantic Provinces	1 728	2 075	3 148	4 339	5 124	5 043
Ontario	1 561	1 818	2 992	4 572	5 667	5 951
Western Canada	1 409	1 780	2 755	3 691	4 716	4 871
Canada	**1 271**	**1 706**	**2 648**	**3 711**	**4 747**	**4 917**

Table 1.16b
Proportion of financial assistance given to Québec university students in the form of loans and bursaries (%)

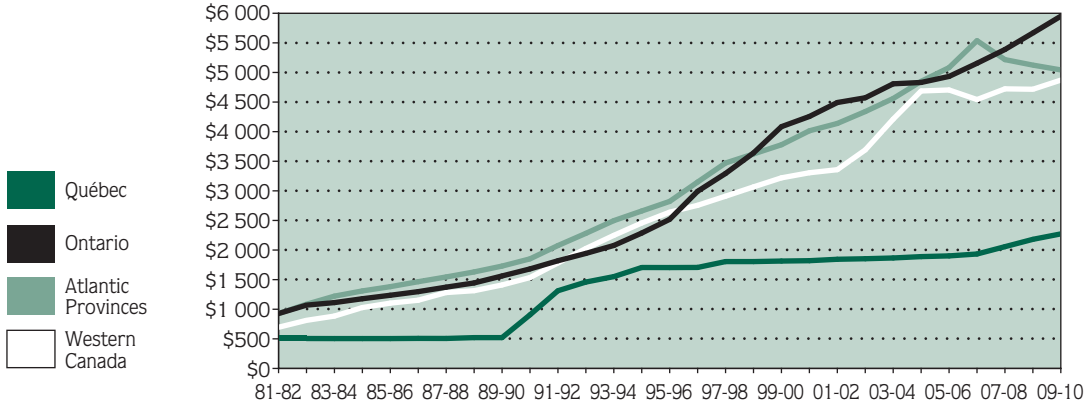
	1990-1991	1995-1996	2000-2001	2005-2006	2006-2007	2007-2008	2008-2009[p]
Loans	59.4	66.4	59.3	61.2	55.4	55.3	54.9
Bursaries	40.6	33.6	40.7	38.8	44.6	44.7	45.1

Sources: The basic data used to calculate these indicators were obtained from Statistics Canada and MELS information systems.

p: Preliminary data

1. In Québec, as of the fall of 1997, Canadian students not residing in Québec have had to pay an additional amount that has been taken into account in the calculation of the average tuition fees (Statistics Canada data). This explains the increase in tuition fees in recent years, despite the freeze on tuition for Québec residents between 1995-1996 and 2006-2007.

Graph 1.16
Average tuition fees for full-time undergraduate university students: Québec and the other regions of Canada (in current dollars)



1.17 Funded and Sponsored Research in Universities

The amount of funding through grants and research contracts allocated to universities has more than doubled from 1996-1997 to 2006-2007, going from $606.8 million to $1.275 billion. Two high points for funding can be noted. The first, which occurred in 2001-2002 and represented a 16.4% rise over the previous year, was partly due to the federal government's payment of indirect costs and the recording of these grants in the Système d'information sur la recherche universitaire (SIRU). The second, which took place in 2003-2004 and represented a 27.6% rise over the previous year, involved the inclusion in the SIRU of grants awarded by the Canada Foundation for Innovation (CFI) and its partners for university research infrastructures. Before this, only grants for equipment and from the New Opportunities Fund were recorded. The following analysis will deal only with the years from 2002-2003 to 2006-2007.

From 2002-2003 to 2006-2007, the amount allocated to research rose from $1.087 billion to $1.275 billion, an increase of $188.0 million, or 4.1% annually. This overall increase can be divided into two periods. From 2002-2003 to 2004-2005, the growth was $296.0 million (or 12.8% annually), followed by a drop of $107.6 million (7.8%) from 2004-2005 to 2005-2006. During this sharp drop, the contributions of all the main partners decreased: that of the federal government dropped by $58.1 million, or 9.0%; that of the Québec government, by $55.8 million, or 16.5%; and that of the Canadian private sector, by $5.4 million, or 2.0%. It should be noted that in the last two years, grants and research contracts allocated to universities remained stable ($1.276 billion to $1.275 billion, respectively, for 2005-2006 and 2006-2007).

The contribution of the Québec government rose from $294.0 million in 2002-2003 to $264.3 million in 2006-2007, that is, a decrease of $29.7 million, or 2.6% annually. This contribution represented 27.0% of total contributions to university research in 2002-2003 and 20.7% in 2006-2007.

The Canadian government's contribution increased from $449.4 million in 2002-2003 to $635.1 million in 2006-2007, an increase of $185.7 million, or 9.0% per year. In 2002-2003, it represented 41.3% of total contributions, compared with 49.8% in 2006-2007.

During this period, Canadian private sector contributions went from $128.2 million to $138.3 million, a growth of $10.1 million (1.9%).

Health sciences, pure sciences and applied sciences received 75.7% of the subsidies and research contracts in 2006-2007, or 34.7%, 23.5% and 17.5%, respectively. Next came social sciences (7.4%), business administration (2.9%), education (1.8%) and lastly, the other fields (12.2%).

In 2006-2007, the average amount of funding per research professor was $139 442.

Since 2001-2002, the amount allocated to university research has exceeded $1 billion, primarily because of the grants awarded by the CFI and its financial partners. During this five-year period ending in 2006-2007, the average annual increase in the amount allocated to research was 4.6%.

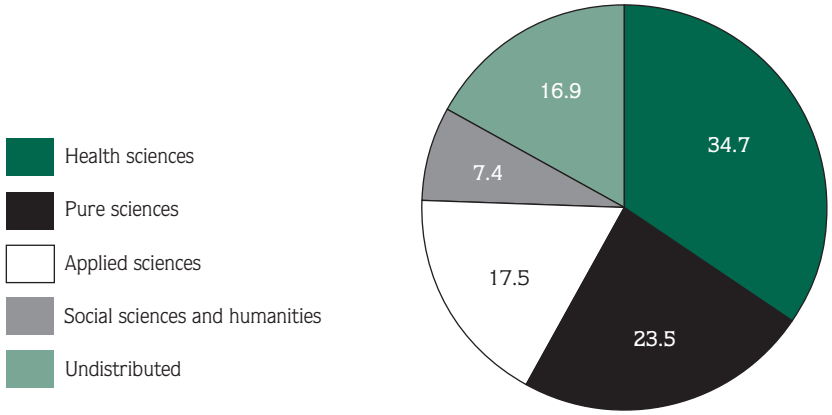
Table 1.17
Funded and sponsored research according to the source of funding and per research professor

	1996-1997	1999-2000	2002-2003	2004-2005	2005-2006	2006-2007
Grants and research contracts (in millions of dollars),[1] by source						
Government of Canada	224.5	275.4	449.4	649.1	591.0	635.1
Government of Québec	142.5	167.7	294.0	337.5	281.7	264.3
Canadian private sector	157.5	180.8	215.7	268.8	263.4	236.7
Other sources	82.3	96.6	128.2	127.9	139.6	138.3
Total	606.8	720.5	1 087.3	1 383.3	1 275.7	1 274.5
Number of research professors[2]	**8 705**	**8 005**	**8 460**	**8 972**	**9 186**	**9 140**
Amount per research professor ($)	**69 707**	**90 006**	**128 522**	**154 180**	**138 874**	**139 442**

1. *This refers to all research receiving direct assistance (grants, contracts, sponsorships, etc.) from either the university itself or outside organizations. Included are research projects conducted under the supervision of university research professors, for which funds have been put into specific accounts managed by the financial services or accounting department of the university, a hospital or a university-affiliated centre (as defined by the Système d'information sur la recherche universitaire [SIRU]).*

2. *This refers to career professors who occupy permanent positions in Québec universities, regardless of whether they are currently involved full-time in teaching-related activities or on sabbatical or career development leave. They may also assume certain administrative tasks. For example, department heads, deans and assistant deans often continue to be active in teaching or research. However, our definition of research professor excludes administrators of services (library directors, registrars, etc.) and senior administrators (rectors and vice rectors). (Source: Ministère de l'Éducation, du Loisir et du Sport and Conference of Rectors and Principals of Québec Universities [CREPUQ],* Enquête sur le personnel enseignant.*)*

Graph 1.17
Funded and sponsored research, according to field of research, 2006-2007 (%)



2.1 School Life Expectancy

A child who began elementary school in 2008-2009 can expect to spend 15.7 years in the education system.[1] Since 1988-1989, the expected duration of school attendance has increased by 0.8 years for male students and 1.5 years for female students. School life expectancy has not markedly improved, however, from the 15.7 years observed in 1993-1994. For male students, it has even decreased by approximately 0.4 years since then, standing now at 15.0 years. In 2005-2006, young people in Québec could expect to spend 15.6 years in school, or about the same amount of time as young people in France.[2]

A breakdown by level of education reveals that all increases since 1987-1988 are attributable to either adult education or postsecondary education. More than half of the additional schooling is a result of college and university studies. At the elementary and secondary levels, schooling rose by 0.42 years as a result of an increase of 0.67 years in the adult sector and a drop of 0.25 years in the youth sector.

At the elementary and secondary levels, the actual duration of schooling more or less corresponds to the projected length of studies. This is not surprising, given that enrollment at these levels of education is virtually universal and compulsory until almost the end of secondary school. At the college and university levels, the reason why the average duration of schooling is less than the length of programs is primarily because not all students go on to postsecondary education.

School life expectancy does not necessarily correspond to the number of years of study begun and successfully completed, because grades repeated are included in the average duration. The slight decline since 1992-1993 in the duration of schooling at the elementary and secondary levels can be explained by the decrease in the number of years that are repeated at this age. At the elementary and secondary levels, male students attend school slightly longer than female students precisely because they have more difficulty. At the college and university levels, women tend to stay in school longer because more of them enroll in postsecondary education than men. Women attend postsecondary school for an average of 4.4 years, compared with 3.1 years for men.

From elementary school to university, in 2008-2009, school-aged Quebeckers could expect to stay in school for an average of 15.7 years.

1. *Technically speaking, school life expectancy for a school year is equal to the sum of the schooling rates (or school attendance rates) for full-time studies (or the equivalent) per year of age. A schooling rate is equivalent to the average number of years of schooling per person. The sum of the rates per age indicates the hypothetical duration of studies for a child who begins elementary school and who, throughout his or her progression through school, is in the schooling situation observed for a given year at various ages.*
2. *Ministère de l'Éducation nationale,* L'état de l'école, *19 (Paris: November 2009).*

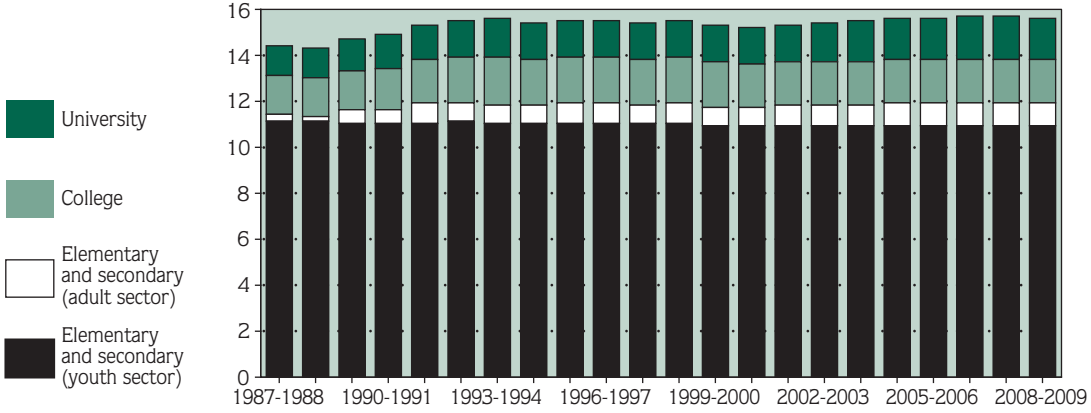
Table 2.1
School life expectancy for a child entering elementary school, by gender and level of education (in years)

	1987-1988	1988-1989	1993-1994	1998-1999	2007-2008	2008-2009[e]
All levels of education by gender						
Male	N/A	14.2	15.4	15.1	15.1	15.0
Female	N/A	14.8	16.0	15.9	16.4	16.3
Total	**14.5**	**14.5**	**15.7**	**15.5**	**15.7**	**15.7**
Both genders according to level of education						
Elementary (youth sector)	6.14	6.16	6.12	6.08	5.95	5.96
Secondary (youth sector)	5.09	5.03	5.01	5.00	5.03	5.02
Elementary and secondary (adult sector)	0.30	0.23	0.84	0.88	0.96	0.97
College	1.74	1.74	2.07	1.99	1.89	1.89
University	1.28	1.34	1.64	1.53	1.87	1.85

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

e: Estimates

Graph 2.1
School life expectancy for a child entering elementary school (in years)



2.2 Enrollment in Preschool Education

Enrollment in kindergarten for 5-year-olds has varied between 97% and 99% for a number of years. There is no significant difference between the enrollment of boys and girls in either kindergarten for 5-year-olds or kindergarten for 4-year-olds. In the past, enrollment in kindergarten for 4-year-olds varied between 6% and 9%; this rate has been significantly higher since 1994-1995 because children in Passe-Partout play groups are now included. In 2008-2009, this rate stood at 19.8%.

For a long time, children enrolled in part-time kindergarten for 5-year-olds accounted for approximately 87% of all students in kindergarten, and this rate was the same for boys as for girls. Since 1997-1998, following the implementation of full-time kindergarten, nearly all boys and girls in kindergarten for 5-year-olds attend on a full-time basis.

Around the world, daycare centres, kindergartens, regular schools and families participate to varying degrees in the education of young children. In Québec, a relatively large portion of educational activities are entrusted to daycare centres, while the official education system becomes involved later in the child's life. Thus, in Québec, 5-year-olds are about as likely to attend kindergarten or elementary school as children in member countries of the Organisation for Economic Co-operation and Development (OECD). In 2006-2007, virtually all developed countries had universal access to school for 5-year-olds. On the other hand, with respect to educational activities for 4-year-olds, Québec is far behind those countries in which the enrollment of 4-year-olds is almost identical to that of 5-year-olds. Similarly, in Québec and the rest of Canada, 3-year-olds do not attend school; this is a rare exception among OECD countries. Moreover, the majority of children enrolled in kindergarten for 4-year-olds in Québec are in a Passe-Partout play group, which means that they are not really part of the school system.

Children with handicaps or with learning or adjustment difficulties account for 2.5% of students in kindergarten for 5-year-olds. For girls, the proportion is 1.4%, but more than double (3.5%) for boys.

In 2008-2009, 98.4% of all eligible children attended kindergarten for 5-year-olds, almost all of them on a full-time basis.

1. *This refers to the number of children in kindergarten for 5-year-olds (regardless of their age) in proportion to the population of 5-year-olds, or 4-year-olds in the case of kindergarten for 4-year-olds. Very few children who are not 5 years of age on September 30 are enrolled in kindergarten for 5-year-olds, and even fewer children in kindergarten for 4-year-olds are not 4 years of age. Variations in the estimates of the population aged 4 or 5 may affect the calculation of these rates, probably more so than any other factor.*
2. *In kindergarten for 5-year-olds, part-time attendance means five half-days per week and full-time attendance, five full days per week. In kindergarten for 4-year-olds, part-time attendance means one to four half-days per week and full-time attendance, five half-days per week.*
3. *The OECD calculates net enrollment rates, that is, the proportion of children of a given age who attend kindergarten or elementary school. These two levels are combined, since there are major differences among countries. The net enrollment rate does not take into account whether children attend school part-time or full-time, or their hours or days of attendance. Here too, major differences can be seen among countries.*

Table 2.2
Proportion of children enrolled in kindergarten for 4-year-olds and for 5-year-olds (%)

	1982-1983	1992-1993	2002-2003	2006-2007	2007-2008	2008-2009
Kindergarten for 4-year-olds	**8.0**	**9.2**	**19.6**	**19.5**	**20.0**	**19.8**
Passe-Partout play group	_	_	11.0	11.9	12.5	12.4
Other categories	_	_	8.5	7.6	7.5	7.4
Kindergarten for 5-year-olds	**97.4**	**96.7**	**98.1**	**97.8**	**97.9**	**98.4**
Full-time[1]	_	9.2	98.1	97.8	97.9	98.4
Part-time[2]	_	87.5	0.0	0.0	0.0	0.0

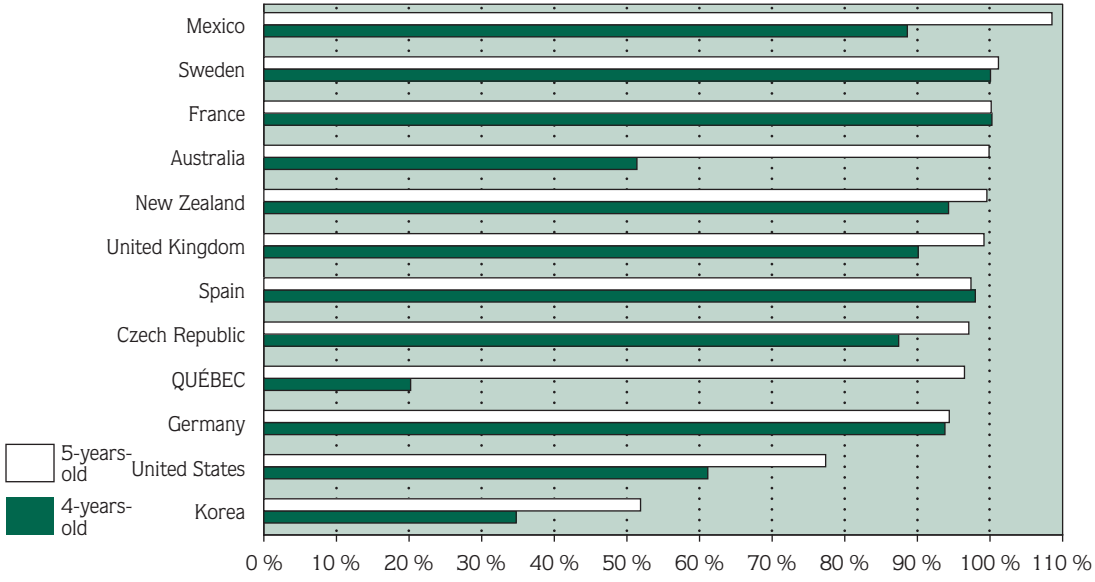
Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

—: Not applicable

1. Full-time: five full days

2. Part-time: five half-days

Graph 2.2
Net enrollment rates for 4-year-olds and 5-year-olds: Québec and various OECD countries, 2006-2007 (%)



2.3 Enrollment in Secondary General Education— Youth Sector

In 2008-2009, 75.0% of young people were enrolled in Secondary V, 83.5% were enrolled in Secondary IV, and 97.0% were enrolled in Secondary III.

From a more historical perspective, Graph 2.3 shows that enrollment in Secondary IV and V increased appreciably in the 1980s. This trend can be explained by the fact that admission to vocational training was delayed to ensure that students spent an extra year in general education. On the other hand, the drop observed in 1985-1986 (in Secondary IV) and in 1986-1987 (in Secondary V) was due to the raising of the pass mark.[1] There was a temporary decline in student retention, but it was not long before an upward trend took hold once again.

In 2008-2009, differences in enrollment between female and male students were observed in Secondary III, where female students were ahead of the male students by 2 percentage points. The gap widened in Secondary IV to 8 percentage points in favour of female students, and in Secondary V to 11 percentage points.

In 2008-2009, 75.0% of young people were enrolled in Secondary V in general education in the youth sector.

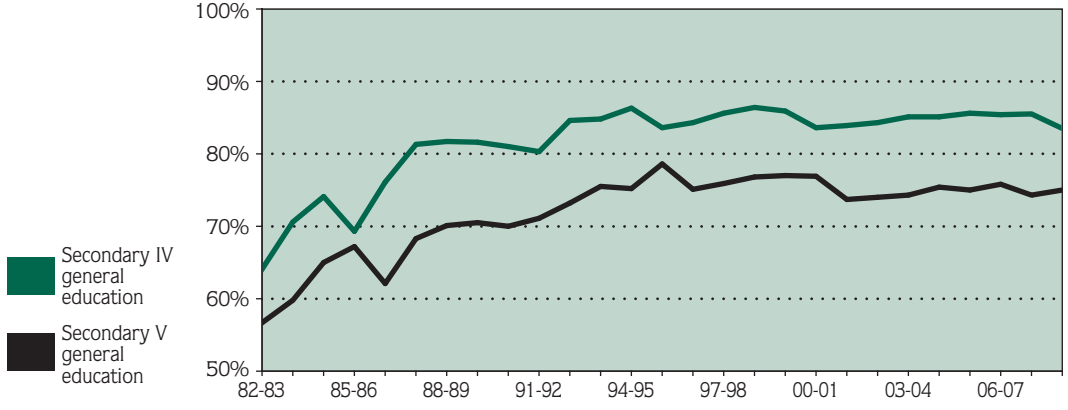
1. *The new, higher pass mark was applied to students entering secondary school in 1982-1983.*

Table 2.3
Proportion of young people enrolling in Secondary Cycle Two general education, public and private systems combined, by gender (%)

	1982-1983	1992-1993	2002-2003	2006-2007	2007-2008	2008-2009
Secondary III	**86.3**	**91.7**	**92.1**	**93.4**	**94.1**	**97.0**
Male	82.5	89.9	90.8	92.1	92.7	96.2
Female	90.3	93.6	93.5	94.8	95.5	97.8
Secondary IV	**64.1**	**84.6**	**84.3**	**85.4**	**85.5**	**83.5**
Male	59.9	81.6	81.2	81.8	82.5	79.4
Female	68.6	87.7	87.6	89.2	88.7	87.8
Secondary V	**56.7**	**73.2**	**74.0**	**75.8**	**74.3**	**75.0**
Male	53.6	68.5	67.8	70.1	68.1	69.5
Female	59.9	78.2	80.4	81.8	80.7	80.7

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

Graph 2.3
Proportion of young people enrolling in Secondary IV and V in general education, public and private systems combined (%)



2.4 Enrollment in Secondary Vocational Education—Youth and Adult Sectors

The proportion of young people under the age of 20 who were enrolled in vocational training programs in 2007-2008 was 18.8%. Since 1999-2000, enrollment of students already holding a Secondary School Diploma (SSD) has been relatively stable, varying between 9% and 10%. In 2007-2008, it stood at 9.3%.

Since short vocational programs were phased out in 1989-1990, most students who would normally have opted for these programs in the past are now enrolled in individualized paths for learning or, more likely, in work skills and life skills education programs, which are a part of general education. Enrollment of students without diplomas was 9.5% in 2007-2008 and represented 51% of all people under the age of 20 enrolling in a vocational training program.

Vocational training programs attract more male than female students. Thus, in 2007-2008, 24.1% of male students opted for this path, compared with 13.3% of female students. This situation applies equally to students who had a diploma and those who did not. This is the opposite of the trend in general education in the youth sector (see Section 2.3), where female students tend to stay in school longer.

In 2007-2008, 18.8% of young people under the age of 20, half of whom already held an SSD, were enrolled in vocational training.

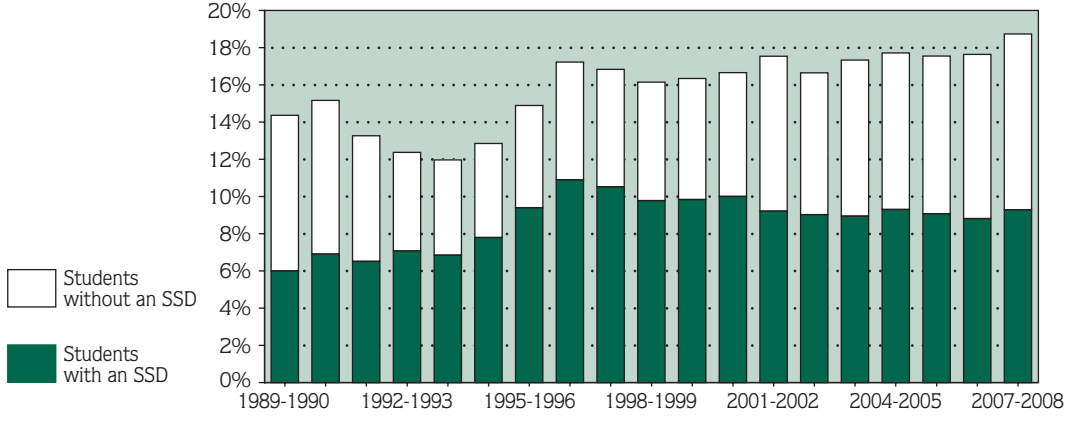
Table 2.4
Enrollment in vocational training of students under the age of 20, youth and adult sectors combined (%)

	1989-1990	1994-1995	1999-2000	2004-2005	2006-2007	2007-2008[p]
TOTAL	**14.4**	**12.8**	**16.4**	**17.8**	**17.6**	**18.8**
Students without an SSD	8.4	5.1	6.6	8.5	8.9	9.5
Students with an SSD	6.0	7.8	9.8	9.3	8.8	9.3
MALE	**18.0**	**15.1**	**19.6**	**22.5**	**21.9**	**24.1**
Students without an SSD	11.5	6.6	8.9	11.6	11.9	13.0
Students with an SSD	6.5	8.5	10.8	10.9	10.0	11.1
FEMALE	**10.6**	**10.5**	**13.0**	**12.9**	**13.2**	**13.3**
Students without an SSD	5.0	3.4	4.2	5.3	5.7	5.9
Students with an SSD	5.5	7.1	8.9	7.6	7.5	7.4

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

p: Preliminary data

Graph 2.4
Enrollment in vocational training of students under the age of 20, youth and adult sectors combined (%)



2.5 Enrollment in Secondary-Level General Education—Adult Sector

Students who do not obtain a Secondary School Diploma (SSD) in the youth sector are not all dropouts. Many of them choose to pursue their studies in the adult sector.

In 2007-2008, 16.4% of school-aged youth under 20 years of age went directly from the youth sector to the adult sector in general education without interrupting their studies. In 1984-1985, the rate was only 1.3%, and has since increased twelve-fold. In view of this, the relatively low rate of 5.0% observed in 1992-1993 (see Graph 2.5) can be attributed to the changes made in the funding of educational activities for adult students in general education; at the time, this funding was part of a restricted envelope. The increase observed in 1993-1994 (from 5% to 9%) was undoubtedly due in part to the fact that the envelope was once again opened for students 16 to 18 years of age.

An analysis of the proportion of students who, after interrupting their studies, return to school in general education in the adult sector reveals that the number of students aged 15 to 19 who returned to the adult sector was higher, until 1986-1987, than the number of students who transferred directly from the youth sector. Since then, however, the latter path has grown in popularity, and in 2007-2008, accounted for close to four fifths of all new enrollments of students under 20 years of age in the adult sector.

The adult sector does not limit its services to providing students leaving the youth sector with the opportunity to earn their diploma through an alternative system. Adult education is also open to those who already have a secondary school diploma but wish to add to their education. And even among students without a diploma who enroll in the adult sector, some simply wish to meet a short-term need, such as acquiring the knowledge or skills taught in a specific course.

In 2007-2008, 16.4% of students under 20 years of age transferred directly from the youth sector to the adult sector.

1. *As a result, the school boards had to encourage students to stay in the youth sector (whose envelope is always open), since funding for the adult sector was reduced in 1992-1993.*

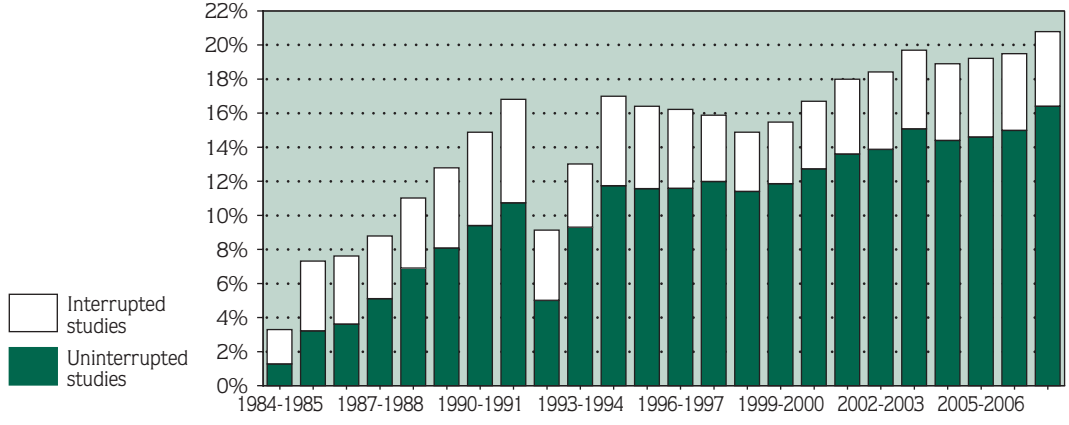
Table 2.5
Enrollment in general education in the adult sector of students under the age of 20 without a secondary school diploma, by gender (%)

	1984-1985	1994-1995	2004-2005	2005-2006	2006-2007	2007-2008
Total	**3.2**	**17.0**	**18.9**	**19.2**	**19.4**	**20.8**
Uninterrupted studies[1] (directly from the youth sector)	1.3	11.7	14.4	14.6	15.0	16.4
Interrupted studies	2.0	5.3	4.5	4.6	4.5	4.4
Male	**3.3**	**19.4**	**21.1**	**21.3**	**21.6**	**22.2**
Uninterrupted studies[1] (directly from the youth sector)	1.4	13.7	16.2	16.2	16.5	17.4
Interrupted studies	1.9	5.8	4.9	5.1	5.0	4.8
Female	**3.1**	**14.6**	**16.7**	**17.1**	**17.2**	**19.3**
Uninterrupted studies[1] (directly from the youth sector)	1.1	9.7	12.6	13.0	13.3	15.4
Interrupted studies	2.0	4.9	4.1	4.1	3.9	3.9

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

1. Refers to students enrolled in the youth sector on September 30 of the preceding year.

Graph 2.5
Enrollment in general education in the adult sector of students under the age of 20 without a secondary school diploma (%)



2.6 Dropping Out of Secondary School

This section measures both official successful completion (graduation) and school attendance of those who have not yet received a diploma. The dropout rate is defined as the proportion of the population that does not attend school and has not obtained a secondary school diploma.

The dropout rate by age is obtained by measuring the proportion of the population with a secondary school diploma by age, and the proportion without a diploma but still in school. The two measurements are added together and deducted from 100.

Graph 2.6 shows the general downward trend of the dropout rate since 1979. The increase observed in the 1980s, however, is due to the raising of the pass mark, which made it more difficult to obtain a secondary school diploma (see Section 5.2). Results for recent years have been relatively stable.

The dropout rate in 2008 was 18.1% for 20-year-olds, 19.4% for 25-year-olds and 17.8% for 30-year-olds. An analysis of the data for a given age reveals that the dropout rate has declined considerably in the past 30 years: the rate for 17-year-olds went from 26.2% in 1979 to 11.3% in 2008, while the rate for 19-year-olds dropped from 40.5% to 18.3% during the same period.

Table 2.6 shows the difference in dropout rates for male and female students and indicates that women are less likely to drop out of school. In 1979, the gender gap was relatively small, but became more pronounced in 2008. For example, for 19-year-olds, the dropout rate for men in 2008 was almost half of what it was in 1979 (23.2% compared with 43.8%); for women, the rate in 2008 was almost one third of what it was in 1979 (13.1% compared with 37.2%). The situation for women has therefore improved more substantially than that for men; this analysis also holds true for the other age groups in Table 2.6.

In 2008, 18.3% of 19-year-olds did not have a secondary school diploma and were not attending school. This proportion was 40.5% in 1979.

1. *The diplomas considered here are the Secondary School Diploma (SSD—including the Short Vocational Diploma and the Long Vocational Diploma), the Secondary School Vocational Certificate (SSVC), the Diploma of Vocational Studies (DVS) (known as the Secondary School Vocational Diploma [SSVD] prior to 1998), the Attestation of Vocational Specialization (AVS), the Attestation of Vocational Education (AVE) and certification for on-the-job training in a recycling facility.*
2. *Either at the secondary or college level. It is possible—although less and less so in the past few years—for a person without a secondary school diploma to be accepted in college. Persons who enroll in university without a secondary school diploma are not taken into account here.*

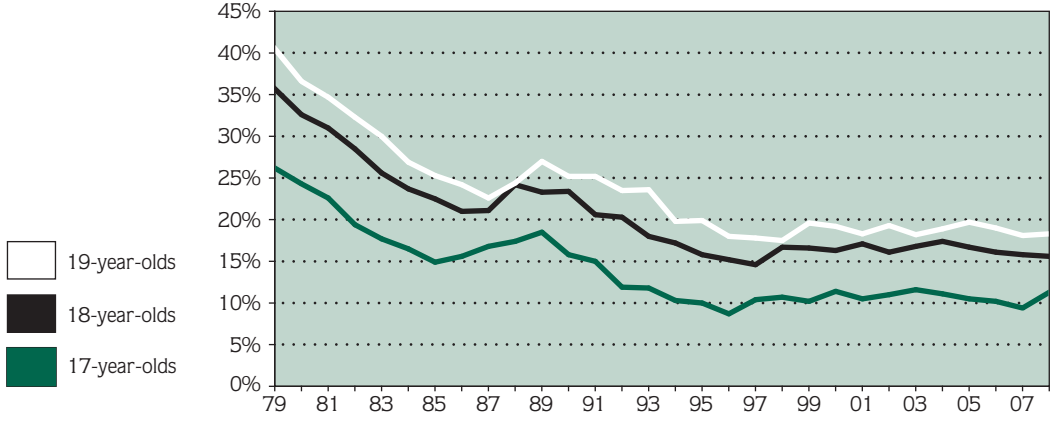
Table 2.6
Dropout rate by age and gender (%)

	1979	1989	1999	2006	2007	2008[e]
17-year-olds	**26.2**	**18.5**	**10.2**	**10.2**	**9.4**	**11.3**
Male	27.6	21.3	13.2	13.3	12.0	14.1
Female	24.7	15.5	7.0	7.0	6.7	8.4
18-year-olds	**35.7**	**23.3**	**16.6**	**16.1**	**15.8**	**15.6**
Male	38.0	27.0	20.4	19.9	20.2	19.7
Female	33.2	19.5	12.6	12.1	11.0	11.3
19-year olds	**40.5**	**27.0**	**19.6**	**19.0**	**18.1**	**18.3**
Male	43.8	31.0	24.5	24.0	22.5	23.2
Female	37.2	22.7	14.5	13.7	13.6	13.1

Source: Ministère de l'Éducation, du Loisir et du Sport

e: Estimates

Graph 2.6
Dropout rate by age (%)



2.7 College Enrollment— Regular Education

In 2008-2009, 64.4% of young Quebeckers went on to college in regular education. College enrollment in regular education has therefore risen by 25.1 percentage points since 1975-1976. This is 0.7 percentage points higher than the rate observed in 1996-1997 (63.7%), just before the drop in the secondary school graduation rate and the tightening of the criteria for admission to CEGEP.[1]

Since the late 1970s, changes in college enrollment can be largely explained by trends observed at the secondary level in the youth sector. There is a correlation between obtaining a secondary school diploma in general education in the youth sector or before the age of 20 in the adult sector, and enrolling in college. This correlation would seem to indicate that the majority of general education graduates, as well as a certain number of vocational training graduates, eventually go on to college.

Since the mid-1970s, the gender gap in college enrollment has widened steadily. Although less than 1 percentage point in 1975-1976, the difference reached 19.2 percentage points in favour of women in 2008-2009.

College enrollment also varies depending on the type of education involved. Although the probability of enrolling in a pre-university college program decreased in 2005-2006, it rebounded to 37.5% in 2008-2009; however, it did not reach the peak of 43.9% observed in 1992-1993. Enrollments in college technical training declined from 21.3% to 16.2% between 1991-1992 and 2006-2007, settling at 17.1% in 2008-2009.

In recent years, the only regular education program where enrollment has increased is Explorations. In 1993-1994, 4.9% of students undertook college studies in this type of program; in 2008-2009, the figure was 9.8%, which, out of a total of 64.4%, represents more than one in ten new enrollments.

In 2008-2009, the college enrollment rate stood at 64.4%, which is a return to the situation that prevailed 15 years ago.

1. *The figures mentioned here include only students enrolled for the first time in programs leading to a Diploma of College Studies (DCS) in regular education.*

2. *Since the fall of 1997, students who enroll in CEGEP must not only have a Secondary School Diploma (SSD) or a Diploma of Vocational Studies (DVS), but must also have successfully completed the following courses: Secondary V language of instruction and second language, Secondary IV History and Physical Science, and Secondary V Mathematics or comparable Secondary IV Mathematics.*

Table 2.7
Full-time or part-time enrollment in regular education in public or private colleges, by gender and type of education (%)

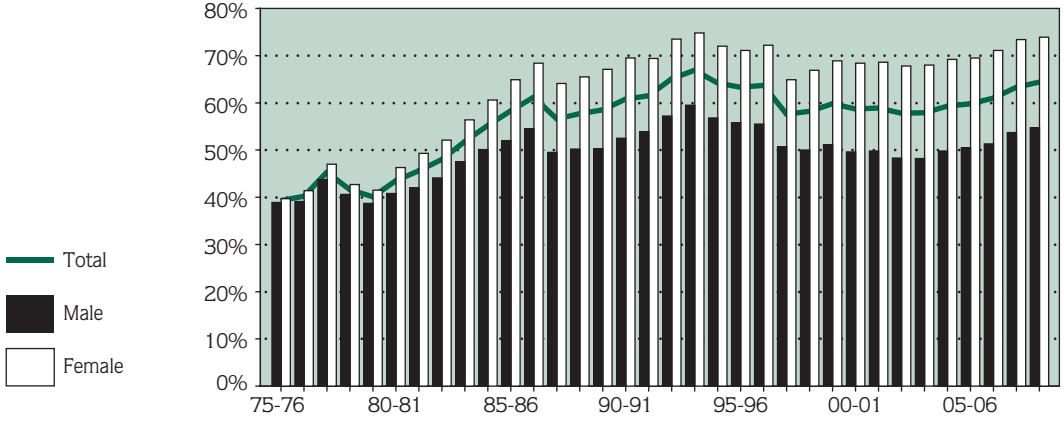
	1975-1976	1985-1986	1995-1996	2005-2006	2007-2008	2008-2009[e]
Male	**38.9**	**52.0**	**55.8**	**50.5**	**53.7**	**54.7**
Pre-university education	25.4	34.2	31.5	29.0	30.2	31.0
Technical training	13.4	17.7	18.5	13.8	13.8	13.9
Explorations	–	–	5.9	7.6	9.6	9.8
Female	**39.7**	**64.9**	**71.1**	**69.5**	**73.4**	**73.9**
Pre-university education	22.5	41.0	44.7	42.5	43.7	44.1
Technical training	17.1	23.9	20.3	19.3	20.2	20.4
Explorations	–	–	6.1	7.7	9.5	9.4
Total	**39.3**	**58.3**	**63.3**	**59.8**	**63.3**	**64.4**
Pre-university education	24.0	37.5	37.9	35.6	36.8	37.5
Technical training	15.3	20.8	19.3	16.5	17.0	17.1
Explorations	–	–	6.0	7.7	9.6	9.8

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

e: Estimates

–: Not applicable

Graph 2.7
Full-time or part-time enrollment in regular education in public or private colleges, by gender (%)



2.8 Immediate Transition from College to University

The main objective of college pre-university education is to prepare students for university. In the fall of 2008, 79.7% of the 2007-2008 graduates aged 24 or under with a Diploma of College Studies (DCS) in a pre-university program[1] were enrolled full-time in university as regular students.[2] Also in the fall of 2008, 79.8% of female graduates with a DCS in a pre-university program were enrolled full-time in university, while 79.6% of male graduates were in the same situation.

Immediate transition rates for graduates of pre-university education to university in 2008-2009 were estimated to be the highest they have been since 2000-2001. The proportion of pre-university education graduates who went on to university without interrupting their studies after obtaining a DCS rose from 78.6% for the class of 2000-2001 to 79.7% for that of 2008-2009. In the past ten years, the transition rates from college to university among graduates with a DCS in a pre-university program aged 24 or under have fluctuated between 77.9% and 81.4%.

In the class of 2007-2008, 26.0% of students aged 24 or under who graduated with a DCS in a technical program were enrolled full-time in university in the fall of 2007. This result—the highest it has been since we began calculating this indicator—confirms the importance of technical training as an alternative path to university. Indeed, the proportion of these graduates going on to university has been over 20% in the past four years, a fact that can partly be explained by the increase in the number of DCS-BAC programs[3] being offered.

More male graduates aged 24 or under with a DCS in a technical program have been enrolling full-time in university applied sciences (electrical engineering, mechanical engineering and computer science, among others) and administrative sciences (especially business administration). Women in the same age group normally enroll in health sciences (mostly nursing sciences and nursing), administrative sciences (especially business administration and accounting) and social sciences (a number of fields, including social services).

Of the graduating class of 2007-2008, 79.7% of students with a DCS in a pre-university program and 26.0% of those with a DCS in a technical training program went on to study full-time at university in the fall of 2008.

1. *This refers to students who obtained a DCS between the months of September and August of a given school year.* Education Statistics Bulletin 28 *presents the figures for the immediate transition from college to university in 2000-2001. It can be consulted on the Ministère's Web site at:* http://www.mels.gouv.qc.ca/stat/Bulletin/.
2. *From 1983-1984 to 1999-2000, estimates were based on the results of the Relance surveys. In 2000-2001, the proportion of college graduates going on to university without interrupting their studies was based on administrative data from the Système de gestion des données sur l'effectif universitaire (GDEU) and the Entrepôt de données ministériel (EDM).*
3. *A university and college can conclude an agreement on a DCS-BAC program that allows students to avoid course content duplication by recognizing a certain number of college courses in university. The total length of studies is generally shortened by a year. Certain bridges also exist that allow for the recognition of certain college courses in university.*

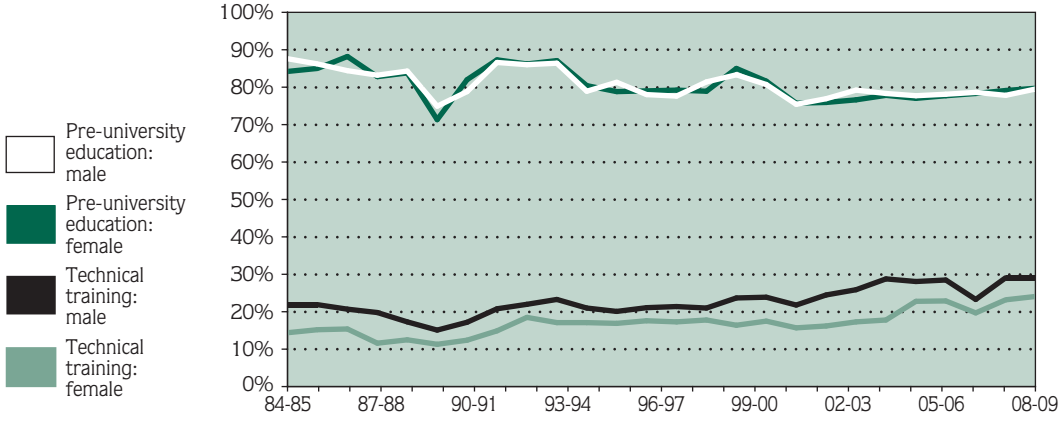
Table 2.8
Proportion of college graduates (24 years or under) enrolling full-time[1] in university without interrupting their studies, by type of education and gender (%)

	1983-1984	1999-2000	2005-2006	2006-2007	2007-2008[2]	2008-2009
Pre-university education	**86.0**	**81.4**	**77.9**	**78.5**	**78.5**	**79.7**
Male	87.7	80.8	78.2	78.7	77.9	79.6
Female	84.3	81.7	77.8	78.4	79.2	79.8
Technical training	**17.4**	**20.0**	**25.0**	**21.1**	**25.4**	**26.0**
Male	21.9	23.9	28.5	23.3	29.1	29.0
Female	14.4	17.5	22.9	19.7	23.2	24.1

Sources: Relance surveys, *from 1983-1984 to 1999-2000;* Gestion des données sur l'effectif universitaire *(GDEU) and* Entrepôt de données ministériel *(EDM), from 2000-2001.*

1. *The statistics produced between 1983-1984 and 1999-2000 are based on government* Relance surveys. *They represent the proportion of college graduates who, on March 31 of the reference year, were not employed and were enrolled in university either part-time or full-time. Since 2001, statistics are from the Système de gestion des données sur l'effectif universitaire (GDEU). The statistics for 2000-2001 to 2007-2008 represent the proportion of students who earned a college diploma between 1999-2000 and 2006-2007 and who were enrolled full-time in a Québec university the following fall. In the calculation of the indicator based on the* Relance surveys, *the inclusion of college graduates enrolled part-time in university and the reference date used (March 31) combined to produce a slightly higher result than that of the new indicator used since 2000-2001.*
2. *Revised data*

Graph 2.8
Proportion of college graduates (24 years old or under) enrolling in university full-time in the fall without interrupting their studies, by type of education and gender (%)



2.9 University Enrollment

This section concerns enrollment[1] in programs leading to a university degree at the bachelor's, master's or doctoral level. Enrollment in certificate programs and in independent studies is not measured here.

In 1992-1993, the proportion of a generation enrolled for the first time in programs leading to a bachelor's degree increased by one third over an 8-year period, climbing to 39.7%, from 30.1% in 1984-1985. From 1992-1993 to 1997-1998, there was a decline of 5.8 percentage points in enrollment in bachelor's programs, when the rate fell to 33.9%. A similar decline was observed in enrollment in pre-university college programs after 1992-1993 (see Section 2.8). Thereafter, the rate began to rise again, reaching 45.0% in 2009-2010. Women posted an even higher rate of enrollment in programs leading to a bachelor's degree at 53.1%.

From 1984 to 2009, only women showed veritable gains in enrollment in bachelor's programs: the rate increased by 21.8 percentage points, whereas men (37.2%) were 8.2 percentage points above the level observed in 1984-1985. The gender gap was 15.9 percentage points in 2009-2010, whereas it had been 2.3 percentage points in 1984-1985, also in favour of women.

With respect to master's programs, enrollment rose in recent years to 12.1% after having dropped in 1997-1998. Here too, gains were more favourable for women, whose enrollment rate was 11.9% in 2009-2010, compared with 10.7% for men. In 1984-1985, the difference was 1.5 percentage points in favour of men. At the master's level, women began showing definitive gains over men in 1993-1994. The overall increase in enrollment in master's programs between 1984-1985 and 2009-2010 was relatively greater than that observed at the bachelor's level.

The growing interest in doctoral studies is significant even though it still applies to only a very small portion of the population. Enrollment rose from 1.1% in 1984-1985 to 2.8% in 2009-2010. Men continue to enroll in doctoral studies at slightly greater rate (3.0%) than women (2.6%), but the number of women enrolling at this level has increased more rapidly in the past two years.

In 2009-2010, the proportion of students enrolling in university was estimated at 45.0% for bachelor's programs, 12.1% for master's programs, and 2.9% for doctoral programs.

1. *Since the data on new enrollments generally used for this indicator were unavailable at the time of writing, preliminary data on enrollments provided by the Conference of Rectors and Principals of Quebec Universities (CREPUQ) were used for the 2008-2009 and 2009-2010 figures. According to CREPUQ, there was a sharp increase in new full-time enrollments in all university programs in the fall of 2009. At the bachelor's, master's and doctoral level, variations in new full-time enrollments were 5.3%, 10.6% and 6.9%, respectively, in the fall of 2009, compared with 0.7%, 0.6% and 2.9% in the fall of 2008. This recent increase in enrollments explains why university enrollment estimates are so high for 2009-2010.*

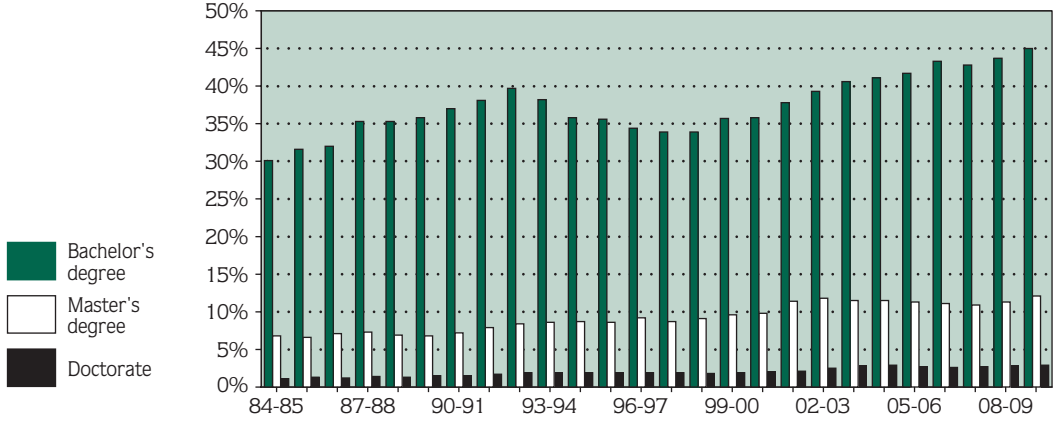
Table 2.9
Enrollment in programs leading to a university degree, by gender (%)

	1984-1985	1992-1993	1997-1998	2007-2008	2008-2009[e]	2009-2010[e]
Bachelor's programs						
Male	29.0	34.8	28.9	35.2	36.0	37.2
Female	31.3	44.9	39.1	50.7	51.7	53.1
Total	**30.1**	**39.7**	**33.9**	**42.8**	**43.7**	**45.0**
Master's programs						
Male	7.5	8.5	8.4	10.3	10.7	11.7
Female	6.0	8.3	8.9	11.6	11.9	12.6
Total	**6.8**	**8.4**	**8.7**	**10.9**	**11.3**	**12.1**
Doctoral programs						
Male	1.4	2.3	1.9	2.8	3.0	3.1
Female	0.8	1.4	1.8	2.6	2.6	2.7
Total	**1.1**	**1.9**	**1.9**	**2.7**	**2.8**	**2.9**

Sources: Ministère de l'Éducation, du Loisir et du Sport, CREPUQ and Statistics Canada

e: Estimates (See Note 1 at the bottom of the text.)

Graph 2.9
Enrollment in programs leading to a university degree (%)



2.10 Training of Researchers

Students enrolled in a program leading to a doctorate are the most likely to go into university research. In the fall of 2008, these students totalled 13 245, a 3.0% increase over the previous fall.

In the fall of 2008, 78.0% of the students enrolled in doctoral programs were studying in social sciences, applied sciences, pure sciences and health sciences. Since the fall of 2000, the proportion of enrollments in applied sciences increased continually, from 16.0% to 21.4%. During the same period, the number of students enrolled in social sciences and literature decreased steadily, from 31.8% to 29.7% and from 6.4% to 4.9%, respectively. The same is true for education where the proportion went from 6.4% in the fall of 2000 to 4.7% in the fall of 2008.

Another striking situation observed over the past few years among students enrolled in doctoral programs is that of the gender distribution, which is constantly changing. In fact, the proportion of men has continued to decrease, going from 64.7% in 1990 to 52.6% in 2008. At the same time, the proportion of women has risen significantly to 47.4% of enrollments in 2008, a level never seen before.

Men outnumber women and account for most of the enrollments in administration, pure sciences and applied sciences. Between 2000 and 2008, male enrollments in the arts more than doubled, increasing by 148.3%. During the same period, enrollments in applied sciences, which account for more than 30% of male enrollments, increased by 105.2%.

In the fall of 2008, women accounted for the majority of enrollments in the following fields: education (63.9%), literature (64.3%), social sciences (60.7%), health sciences (57.6%), law (51.9%) and the arts (51.6%). Between 2000 and 2008, female enrollments in all fields of study increased by 58.3%, while the number of women in applied sciences doubled from 322 to 663.

In the fall trimester of 2008, enrollments in doctoral programs grew by 3.0%, compared with the fall of 2007. This increase is the result of a 3.5% rise in female student enrollment and of a 2.5% rise in male student enrollment.

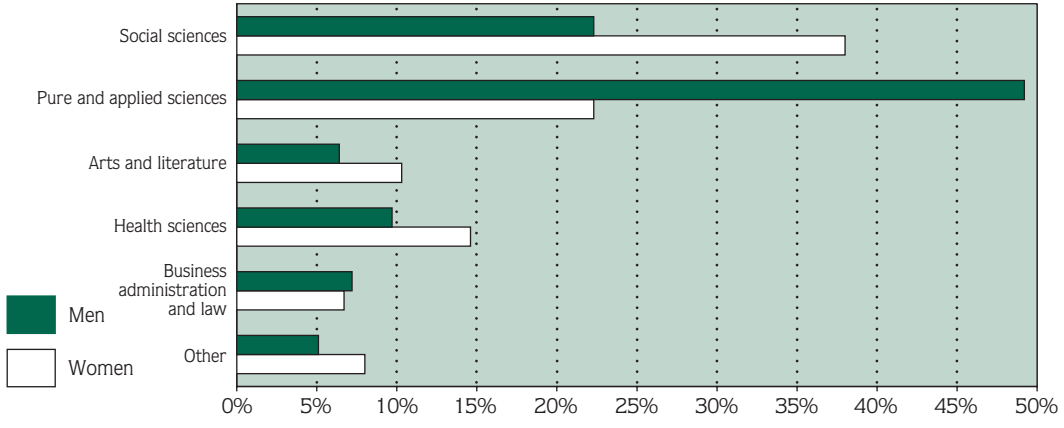
Table 2.10
Enrollment in doctoral programs, by field of study (fall trimester)

	2000	2003	2004	2005	2006	2007	2008
Arts	200	279	311	353	367	424	446
Literature	607	602	631	674	651	631	647
Business administration	476	599	666	706	720	724	713
Law	109	127	153	169	188	211	214
Education	556	555	565	591	636	613	628
Social sciences	2 746	3 016	3 283	3 492	3 596	3 810	3 938
Pure sciences	1 356	1 530	1 651	1 788	1 867	1 923	1 990
Applied sciences	1 383	2 012	2 294	2 469	2 628	2 724	2 840
Health sciences	1 114	1 353	1 447	1 512	1 539	1 579	1 598
Multidisciplinary studies	92	143	154	187	207	204	207
Not applicable[1]	9	26	19	28	28	20	24
Total	**8 648**	**10 242**	**11 174**	**11 969**	**12 427**	**12 863**	**13 245**

Source: Ministère de l'Éducation, du Loisir et du Sport

1. All situations for which there is no indication of the student's discipline or for which the Ministère has decided not to indicate a discipline.

Graph 2.10
Enrollment in doctoral programs, by gender and field of study, fall 2008 (%)



2.11 The Proportion of International Students in Postsecondary Education

Postsecondary education has always been open to foreign students. However, in recent years, the world has experienced a major trend toward the increased globalization of economies and societies, accompanied by a sharp rise in the numbers of foreign students. Québec is no exception.

According to the Organisation for Economic Co-operation and Development (OECD), the number of students educated in countries that are not their own rose by 131%, from 1.3 million in 1990 to 3.0 million in 2007.[1] During this period, the number of foreign university students in Québec increased from 9 135 to 22 303, which represents a slightly higher growth rate (144%) than the global rate.[2]

In the Québec college system, the number of foreign students has risen sharply in the past five years (68.0%) in relation to an overall increase in the total number of enrollments of 4.8% (see Table 2.11a). However, it must be noted that, in the fall of 2008, foreign students represented only 1.3% of college enrollments. This may be due to the unique nature of the Québec college system, which has no equivalent outside of Québec.

At the university level, the number of foreign students is growing slightly more rapidly than the total number of enrollments. Thus, the proportion of foreign students is increasing steadily, from 8.2% in 2003 to 8.5% in 2008. If we look at the situation by level of studies, we note that the ratio of foreign students to total enrollments increases as the level of studies increases: it is 7.2% in bachelor's programs, 10.8% in master's programs and 20.0% in doctoral programs (see Table 2.11b).

In the fall of 2008, Québec university foreign students hailed from 165 countries of origin. Most of them, however, or 57.0%, came from five countries. The largest group by far was from France (30.9%), followed by the United States (12.1%), China (6.1%), Morocco (4.7%), Tunisia (2.8%) and 160 other countries throughout the world (43.4%) spread over all the continents (see Graph 2.11).

In the fall of 2008, foreign students accounted for 8.5% of total enrollments in Québec universities.

1. *OECD*, Education at a Glance 2009, *Chapter C, 334.*
2. *Ministère de l'Éducation, du Loisir et du Sport, Système GDEU, 2009. Note that, in Québec, a foreign student is a student enrolled in an educational institution who is not a Canadian citizen, a permanent resident or an Indian as defined in the* Indian Act.

Table 2.11a
Foreign students in the Québec education system

	Fall 2003	Fall 2008	Variation 2008/2003
College			
Foreign students	1 645	2 763	**68.0%**
Total enrollments	195 803	205 266	**4.8%**
Foreign students/total enrollments (%)	**0.7**	**1.3**	
University			
Foreign students	20 934	22 504	**7.5%**
Total enrollments	255 853	264 029	**3.2%**
Foreign students/total enrollments (%)	**8.2**	**8.5**	

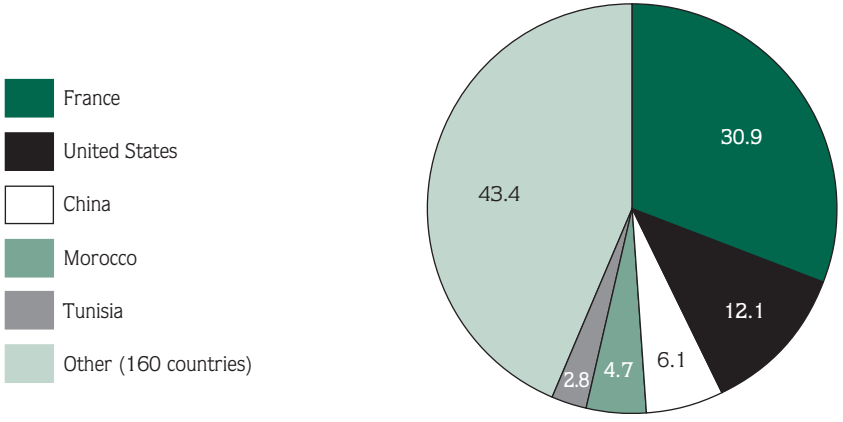
Sources: Ministère de l'Éducation, du Loisir et du Sport, Système Socrate (September 2009) and Système GDEU (June 2009)

Table 2.11b
Proportion of foreign students in the different levels of university studies, fall 2008

	Bachelor's programs	Master's programs	Doctoral programs	Total
Foreign students	14 769	5 034	2 701	22 504
Total enrollments	203 850	46 658	13 521	264 029
Foreign students/ total enrollments (%)	**7.2**	**10.8**	**20.0**	**8.5**

Source: Ministère de l'Éducation, du Loisir et du Sport, Système GDEU (June 2009)

Graph 2.11
Countries of origin of foreign university students, fall 2008 (%)



3.1 Success in Secondary Cycle Two of General Education—Adult Sector

In 2007-2008 in general education in the adult sector, 50.6% of students who left Secondary Cycle Two obtained a diploma. In 1988-1989, the first year for which figures on new enrollments in this sector are available, the proportion of graduates was 23.2%; the rate has therefore doubled since then.

Of the various instructional services available in general education in the adult sector, only Secondary Cycle Two normally leads to a diploma. The aim of the other services is to complete the students' education in order to enable them to eventually enter Secondary Cycle Two or acquire the prerequisites for vocational training or postsecondary education.

Among students leaving school, the proportion leaving with a diploma is higher for those under 20 years of age than for all ages combined. Thus, in Secondary Cycle Two, 62.5% of the students leaving before the age of 20 did so with a diploma; progress has been considerable in this respect because the corresponding proportion for 1988-1989 was 36.3%.

Since 1988-1989, the graduation rate has been slightly higher for female students than for male students. Between 1988-1989 and 2007-2008, the gender gap widened from 0.9 to 6.7 percentage points for all ages combined. For those under 20 years of age, it grew from 0.2 to 6.0 percentage points in the same period.

In 2007-2008, of the students under the age of 20 enrolled in Secondary Cycle Two in the adult sector, 62.5% left school with a diploma.

1. *Success in general education is measured here by the proportion of new graduates among all general education students leaving secondary school with or without a diploma. The diplomas counted are those obtained during or at the end of the last year of enrollment or the following year if the student has not re-enrolled. Students are considered to have left school without a diploma when they have been absent for a period of at least two years following the last year of enrollment.*
2. *The following instructional services are offered in general education in the adult sector: pedagogical support services, literacy services, preparatory services for secondary education, Secondary Cycle One education services, Secondary Cycle Two education services, social integration services, sociovocational integration services, francization services, vocational training preparation services, and preparatory services for postsecondary education.*

Table 3.1
Proportion of students leaving general education in the adult sector with a diploma,[1] by gender, instructional service, age and last year of enrollment (%)

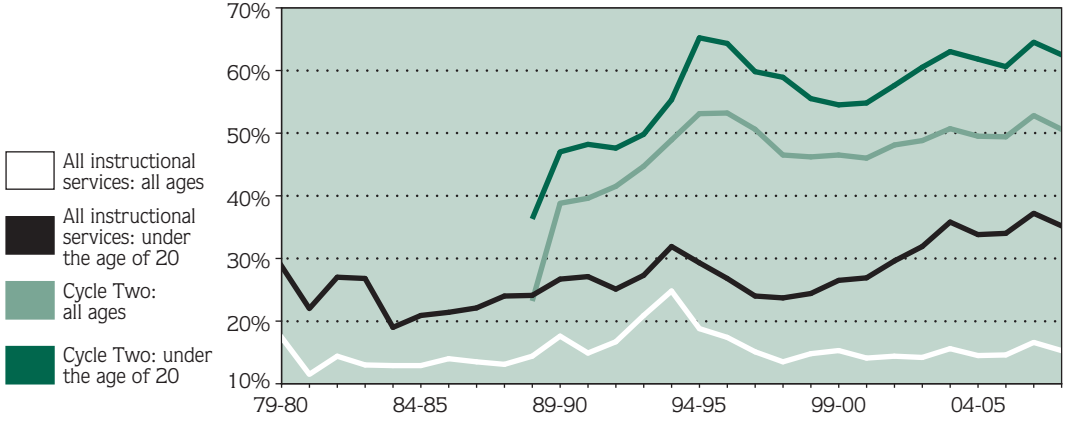
	1988-1989	1995-1996	2000-2001	2005-2006	2006-2007[e]	2007-2008[e]
Male						
Secondary Cycle Two	22.7	50.2	44.8	45.8	49.8	47.2
Under the age of 20	36.2	61.0	53.3	57.4	62.0	59.7
Female						
Secondary Cycle Two	23.6	55.9	51.3	52.8	55.7	53.9
Under the age of 20	36.4	67.5	62.3	64.1	67.3	65.7
Total						
Secondary Cycle Two	23.2	53.2	48.0	49.4	52.8	50.6
Under the age of 20	36.3	64.3	57.5	60.6	64.5	62.5

Source: Ministère de l'Éducation, du Loisir et du Sport

e: Estimates

1. All secondary school diplomas are taken into account.

Graph 3.1
Proportion of students leaving general education in the adult sector with a diploma, by last year of enrollment (%)



3.2 Success in Secondary Vocational Training[1]

Of the students in vocational training[2] who left secondary school in 2007-2008, 63.6% obtained a diploma. If only those students who were actually working toward a diploma, that is, full-time students,[3] are considered, the proportion of graduates climbs to 86.0%.

Since the beginning of the vocational training reform in 1987-1988, the percentage of graduates has increased appreciably. For example, at the end of 2007-2008, the proportion of students graduating from programs leading to a Diploma of Vocational Studies (DVS) was 73.8%, compared with 54.4% in 1990-1991. The success rate for long vocational programs does not seem to have increased much since the mid-1980s, but the data available on long vocational programs concerns only the youth sector. If only full-time students[3] are considered, progress is more evident. As noted earlier, the proportion of students who completed their studies in 2007-2008 with a diploma was 86.0%, compared with 56.3% in 1980-1981.

However, if we consider all school leavers without taking into account the sector or whether enrollment is full-time or part-time, the proportion of diplomas has also increased since the early 1980s. Thus, the success rate of persons enrolled in vocational training for the last time in 1980-1981 was 46.6%. This figure rose to 63.6% in 2007-2008.

There was a significant decline in the number of new enrollments in vocational training during the 1980s (see Section 2.4). Students are now required to spend more time in general education before being admitted into vocational training. General education graduates still have higher success rates in vocational training than students who do not already have a diploma. This explains in large part the higher success rate observed for all school leavers in recent years.

The differences in the results of male and female students have varied over the years. In 1999-2000, there was a reversal in trends relating to graduation from programs leading to a DVS, when the success rate of female students surpassed that of male students (70.2% compared with 63.9%). In the past, the success rate for male students was 2 to 10 percentage points higher than that for female students. However, when only the overall graduation rate by gender is considered, without taking into account the sector or whether they study full-time or part-time, the success rate for female students has been higher for a long time. In 1985-1986, the proportion of female students graduating from vocational training was 36.2%, compared with 28.7% for male students; in 2007-2008, the proportions were 72.3% and 57.9%, respectively.

In 2007-2008, the success rate for male and female students in programs leading to a DVS was 72.8% and 75.0%, respectively.

1. *Success in vocational training is measured here by the proportion of new graduates among all vocational training students leaving secondary school with or without a diploma. The diplomas counted are those obtained during or at the end of the last year of enrollment or the following year if the student has not re-enrolled. Students are considered to have left school without a diploma when they have been absent for a period of at least two years following the last year of enrollment.*
2. *Because school boards are not required to transmit vocational training enrollment data when a diploma, attestation or certificate is not awarded, the denominator for the success rate may be incomplete.*
3. *Students enrolled for 270 course hours or more per year are considered full-time.*

Table 3.2

Proportion of students leaving secondary vocational training with a diploma,[1] by gender, category and last year of enrollment (%)

	1980-1981	1985-1986	1990-1991	1995-1996	1999-2000	2006-2007[e]	2007-2008[e]
Male							
Long vocational or DVS[2]	57.1	58.3	60.0	67.7	63.9	75.3	72.8
Full-time[3]	51.8	51.4	81.1	79.5	81.6	86.1	85.2
All male school leavers	48.3	28.7	21.7	46.2	50.7	62.1	57.9
Female							
Long vocational or DVS[2]	65.5	69.5	50.3	64.5	70.2	74.5	75.0
Full-time[3]	61.3	62.0	80.0	78.3	82.4	87.1	86.9
All female school leavers	45.2	36.2	39.3	54.0	65.7	72.6	72.3
Total							
Long vocational or DVS[2]	61.7	64.1	54.4	66.1	66.6	75.0	73.8
Full-time[3]	56.3	56.6	80.6	78.9	82.0	86.6	86.0
All school leavers	46.6	32.1	27.9	49.5	56.6	66.5	63.6

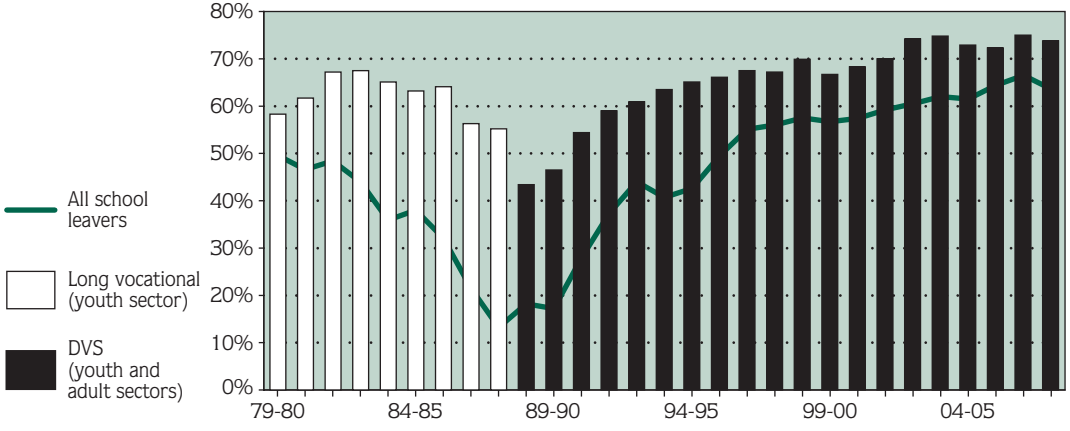
Source: Ministère de l'Éducation, du Loisir et du Sport

e: Estimates

1. *All secondary school diplomas are taken into account.*
2. *Figures for 1980-1981 and 1985-1986 cover enrollment in long vocational programs in the youth sector only. After 1988-1989, figures take into account DVSs in both the youth and adult sectors.*
3. *Students enrolled in 270 course hours or more per year are considered full-time.*

Graph 3.2

Proportion of students leaving secondary vocational training with a diploma, by last year of enrollment (%)



3.3 Success in Pre-University Programs—Regular College Education

Of the students in pre-university college programs who left regular education at the end of 2007-2008, 72.4% earned a Diploma of College Studies (DCS). In the past two decades, this rate has fluctuated between 63.9% and 73.3%. The success rate has increased appreciably since 1999-2000, when it stood at 69.3%. Before the drop in 1999-2000, an increase in success rates had been observed: from 64.7% in 1995-1996 to 70.2% in 1998-1999. The stricter admission criteria that came into effect in the fall of 1997 (see Section 2.7) largely explain this increase, because fewer of the students who are most likely to quit their studies are now able to enroll in college.

Women tend to do better than men in pre-university programs, and the gap has grown over the years. In 1980-1981, the proportion of women finishing their pre-university education with a DCS surpassed that of men by 4.0 percentage points. In 2007-2008, the difference was 13.9 percentage points in favour of women (it was 10.8 percentage points in 1995-1996). This phenomenon, coupled with the fact that more women than men enroll in college (see Section 2.7) explains the gender gap with respect to graduation rates (see Section 5.5).

When the type of initial college program is taken into account, the success rate is slightly above average for students who began their studies in pre-university programs: in 2007-2008, it was 74.8%. Students arriving from technical programs had markedly lower success rates. Given that since 1994-1995 some graduates have also begun in Explorations programs, the success rate remained lower for pre-university program students who came from another type of program. This rate did not clear the 50% mark until 1998-1999 and reached 55.1% in 2007-2008.

In theory, it takes two years to obtain a DCS in a pre-university program, but few students do so within this time frame. In fact, the rate of completion within two years (that is, the time elapsed from initial enrollment in a program leading to a DCS) reached 44.8% in 2007-2008 for students who began their studies in a pre-university program. This rate was at its lowest point, 35.0%, in 1986-1987. If all pre-university program graduates are considered, regardless of the program in which they were initially enrolled, obviously their success rate for two-year completion will be slightly lower because students who transfer from other programs spend more time in school. Generally, the majority of the pre-university DCSs are obtained within five years of the start of college studies; in 2007-2008, the corresponding success rate was 73.5%.

Of the students in pre-university education completing their studies in 2007-2008, 72.4% graduated with a DCS; this figure has increased by 3.1 percentage points since 1999-2000.

1. *Success in pre-university programs in regular college education is measured here by the proportion of new graduates among all students in pre-university programs in regular college education who leave programs leading to a DCS, with or without a diploma. DCSs of all types are considered, whether they were obtained during or at the end of the school year in which the student was last enrolled, or the following year if the student has not re-enrolled in a program leading to a DCS. Students are considered to have left school without a diploma when they have been absent for a period of at least two years following the last year of enrollment.*

Table 3.3

Proportion of students leaving a pre-university program with a DCS, by last year of college enrollment in regular education; gender; type of initial program; and time elapsed[1] since initial enrollment (%)

	1980-1981	1990-1991	1995-1996	1999-2000	2006-2007[e]	2007-2008[e]
Male and female						
Same type of initial program						
2 years or less[1]	N/A	40.5	36.6	42.6	44.9	44.8
5 years or less[1]	N/A	70.8	65.2	70.0	72.6	73.5
All durations	N/A	72.0	66.5	71.3	73.8	74.8
Other type of initial program[2]						
All durations	N/A	61.3	47.5	53.7	53.2	55.1
All types of initial programs—all durations						
Male and female	66.8	71.4	64.7	69.3	71.3	72.4
Male	64.9	66.2	58.7	61.7	63.4	64.4
Female	68.8	75.8	69.5	74.7	77.2	78.3

Source: Ministère de l'Éducation, du Loisir et du Sport

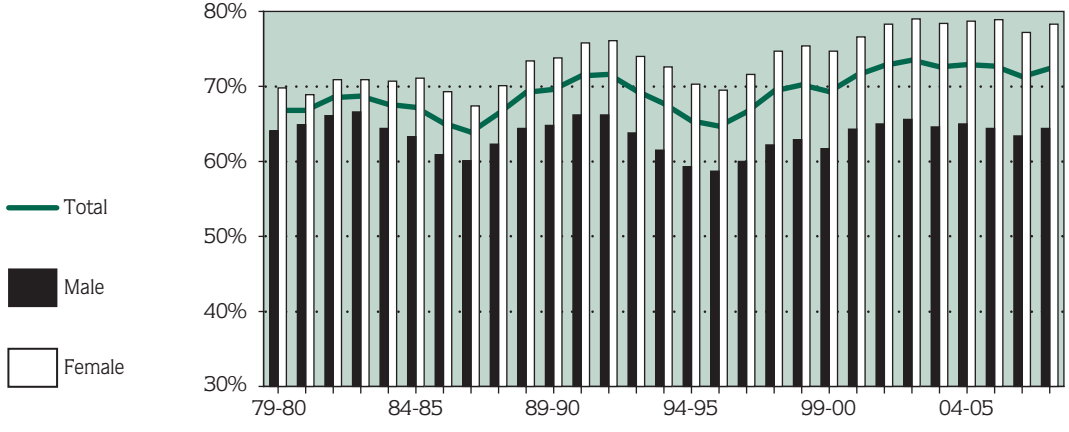
e: Estimates

N/A: Data not available

1. *The time elapsed since initial enrollment is not necessarily the same as the duration of studies, because the studies may have been interrupted at some point.*
2. *Until 1993-1994, this category referred to students who began their studies in a technical program. As of 1994-1995, this category also includes students who leave pre-university education (with or without a diploma) after having begun in an Explorations program the previous year.*

Graph 3.3

Proportion of students leaving a pre-university program with a DCS, by gender and last year of enrollment in regular college education (%)



3.4 Success in Technical College Programs—Regular Education

Of the students attending college in regular education who left technical programs at the end of 2007-2008, 62.4% earned a Diploma of College Studies (DCS). Over the past two decades, this figure has fluctuated between 52.7% and 63.6%.

In this area, women still fare better than men. The gender gap was at its greatest (17.1 percentage points) in 1997-1998. In 2007-2008, the success rate for women was 68% compared with 55% for men, a difference of 13 percentage points in favour of women. This phenomenon, coupled with the fact that more women than men enroll in college (see Section 2.7), explains the difference between the sexes with respect to graduation rates (see Section 5.5).

When the type of initial college program is taken into account, in 2007-2008, the success rate was slightly higher than the average for students who began their studies in technical programs. Moreover, until 1993-1994, students who began in pre-university programs and who transferred to technical programs had markedly higher success rates. Since 1994-1995, the success rates of students who began their college studies in programs other than technical programs were brought down by the rates of students in Explorations programs (introduced in 1993-1994).

In theory, it takes three years to earn a DCS in a technical program, but few students do so within this time frame. In fact, the rate of completion within three years (that is, the time elapsed from initial enrollment in a program leading to a DCS) was 34.1% in 2007-2008 for all students who began and completed their studies in technical programs. If all technical training graduates are considered, regardless of the program in which they were initially enrolled, obviously their success rate for three-year completion will be slightly lower because students who transfer spend more time in school. Generally, a higher proportion of technical DCSs were obtained within five years of the start of college studies; in 2007-2008, the corresponding success rate was 55.1%.

Of the students in technical programs completing their studies in 2007-2008, 62.4% earned a DCS.

1. *Success in technical college programs in regular education is measured here by the proportion of new graduates among all students in technical college programs in regular education who leave programs leading to a DCS, with or without a diploma. DCSs of all types are considered, whether they were obtained during or at the end of the school year in which the student was last enrolled, or the following year if the student has not re-enrolled in a program leading to a DCS. Students are considered to have left school without a diploma when they have been absent for a period of at least two years following the last year of enrollment.*

Table 3.4

Proportion of students leaving a technical program with a DCS, by last year of college enrollment in regular education, gender, type of initial program, and time elapsed since initial enrollment[1] (%)

	1980-1981	1990-1991	1995-1996	1999-2000	2006-2007[e]	2007-2008[e]
Male and female						
Same type of initial program						
3 years or less[1]	N/A	29.6	26.8	31.6	32.6	34.1
5 years or less[1]	N/A	51.1	47.8	52.4	52.3	55.1
All durations	N/A	56.6	53.1	57.6	59.6	62.1
Other type of initial program[2]						
All durations	N/A	64.4	55.7	57.8	62.8	62.9
All types of initial programs—all durations						
Male and female	59.0	58.6	53.9	57.7	60.7	62.4
Male	53.9	54.7	46.1	50.1	53.9	55.0
Female	63.0	61.3	60.9	64.6	65.6	68.0

Source: Ministère de l'Éducation, du Loisir et du Sport

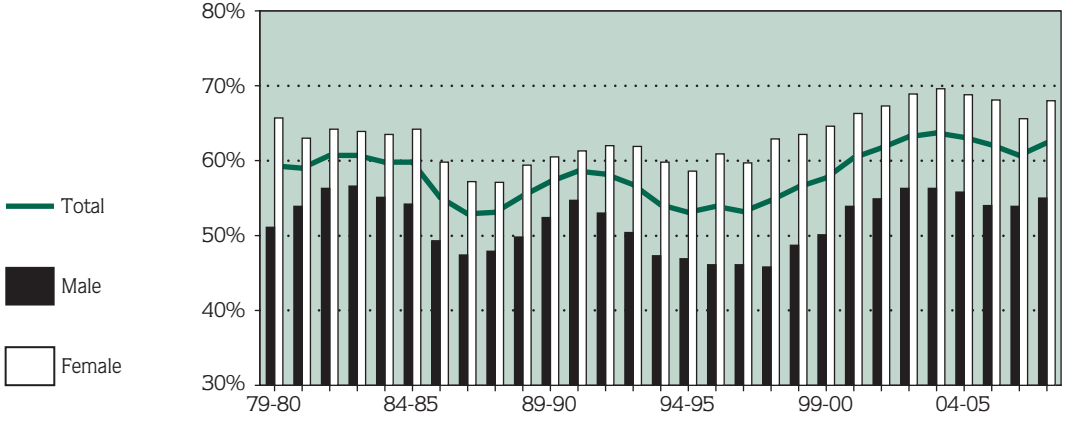
e: Estimates

N/A: Data not available

1. *The time elapsed since initial enrollment is not necessarily the same as the duration of studies, because the studies may have been interrupted at some point.*
2. *Until 1993-1994, this category referred to students who began their studies in a pre-university program. As of 1994-1995, this category also includes students who left technical training (with or without a diploma) after having begun in an Explorations program the previous year.*

Graph 3.4

Proportion of students leaving a technical program with a DCS, by gender and last year of enrollment in regular college education (%)



3.5 Duration of College Studies—Regular Education

The duration of studies for graduates with a Diploma of College Studies (DCS) and for all students (regardless of whether or not they obtain a DCS) has changed very little over the years.[1]

Graduates from pre-university education have studied for an average of 2.4 years. For those who leave college without a diploma, the total duration of studies is still an average of 1.5 years. The average duration of studies, whether students leave with or without a diploma, is 2.2 years. For most students, that is, those who began their college studies directly in pre-university programs, the corresponding durations are similar or are 0.1 years less. Students who transferred from another type of program take 3.2 years to obtain their DCS in pre-university education.

Students in technical programs take an average of 3.9 years to earn a DCS, while those who leave without a diploma do so after 2.2 years. Given the success rate (see Section 3.4), students leaving technical programs study for 3.2 years. Here too, those students who enrolled in technical programs right from the beginning of their college studies leave in a shorter time: those leaving with a DCS do so in 3.5 years and those leaving without a diploma do so after 1.8 years. By contrast, students who had initially enrolled in pre-university programs (who have a higher success rate) or in Explorations programs take 4.5 years to obtain a DCS in technical training.

Very slight differences in the duration of studies are apparent in the figures for men and women, and according to the status upon leaving. In pre-university education, female graduates, like women who leave their studies before obtaining a diploma, do so sooner (0.1 years) than men. There are no differences, however, when college leavers overall are considered by gender because more women than men obtain a diploma, thereby raising the average duration of studies for women overall. The same effect can be observed in technical training, where female graduates study 0.1 years less than their male counterparts, while women who leave their studies before obtaining a diploma spend the same amount of time in school as men (average of 2.2 years).

> On average, a DCS in pre-university education is obtained after 2.4 years of full-time equivalent study and a DCS in technical training, after 3.9 years.

1. *This is why the results provided in this section are the averages for college leavers for the last five years observed (that is, the averages for students enrolled for the last time from 2002-2003 to 2006-2007). However, in the case of students leaving without a diploma, over a 10-year period, the duration of studies before dropping out has lengthened, by 0.4 of a full-time semester for pre-university education and by 1 full-time semester for technical training.*
2. *The duration of studies for all college leavers depends, on the one hand, on the respective duration of studies of students with a DCS and college leavers without a diploma; and on the other hand, on the weighting of these two categories of students, that is, the success rate. This explains why the duration of studies for all students, whether or not they leave with a diploma, has remained stable, even though the success rates have been dropping and the duration of studies for those leaving without a diploma has been getting longer.*

Table 3.5

Average number of years[1] of study completed before leaving college in regular education (average for all college leavers after 2002-2003), by gender and type of program enrolled in at the start and at the end of their studies

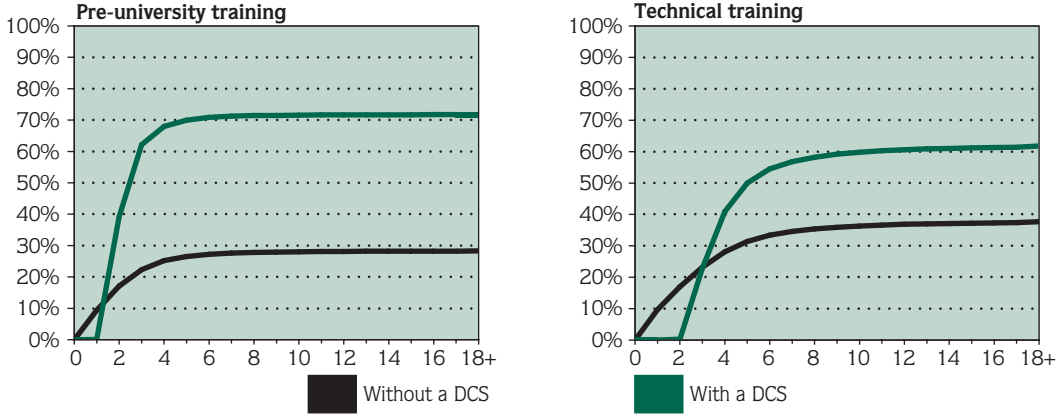
	With Diploma		Without Diploma[2]		Total	
	Pre-university education	Technical training	Pre-university education	Technical training	Pre-university education	Technical training
Male	2.5	3.9	1.6	2.3	2.2	3.2
Female	2.4	3.8	1.5	2.1	2.2	3.3
Total[3]	**2.4**	**3.9**	**1.5**	**2.2**	**2.2**	**3.2**
Type of initial program						
Same	2.3	3.5	1.4	1.8	2.1	2.9
Different[3]	3.2	4.5	2.1	2.9	2.7	3.9

Source: Ministère de l'Éducation, du Loisir et du Sport

1. *One year of full-time study is equivalent here to two full-time semesters or eight part-time semesters.*
2. *Refers to students who have interrupted their studies for at least six consecutive semesters.*
3. *Refers to the total duration, including studies undertaken previously in other types of programs.*

Graph 3.5

Cumulative school-leaving rates for regular college education between 2002-2003 and 2006-2007, by number of years elapsed since initial enrollment in a program leading to a DCS (%)



3.6 Success and Duration of Studies in Bachelor's Programs

At the end of 2007-2008, 66.7% of students leaving a bachelor's program earned their degree. In the 20-year period observed, the graduation rate increased from 55.9% for students enrolled for the last time in 1987-1988.

From the beginning of the period under observation, female students have had higher success rates than male students, with the difference rising from 0.7 in 1987-1988 to 5.6 percentage points in 2007-2008, and a maximum gap of 7.7 percentage points in 1996-1997. In the last year observed, 69.0% of female students who left a bachelor's program did so with a degree, compared with 63.4% of their male counterparts. This phenomenon, coupled with the fact that more women than men enroll in bachelor's programs (see Section 2.9), may explain the gender gap with respect to graduation rates (see Section 5.6).

Graduates of bachelor's programs studied an average of 6.7 full-time semesters, or 8.9 semesters if full-time or part-time status is not taken into account.[1] Those who left without a degree studied an average of 2.5 semesters, or slightly more than one year, full-time. For all students leaving bachelor's programs, the average duration of studies was 7.4 semesters, 5.2 of which were full-time.

Differences in the duration of studies are apparent in the figures for men and women, and according to the attendance status upon leaving. Whether women obtain a bachelor's degree or give up their studies without a degree, they do so sooner than men. Women who obtain a bachelor's degree spend 0.4 of a semester less in full-time studies than men, while women who leave their program without a degree do so 0.4 of a semester sooner than men. Nevertheless, when the duration of studies is considered, regardless of full- or part-time status, the gender difference is not as pronounced, because more women than men study part-time. For all students leaving bachelor's programs, the gender difference is less evident, mainly because more women than men obtain a degree, which raises the average duration of studies for women overall.

For every 100 students leaving a bachelor's program at the end of 2007-2008, 67 earned a degree.

1. *Success in university bachelor's programs is measured here by the proportion of new graduates among all students leaving the programs with or without a degree. The degrees taken into account are bachelor's degrees obtained during or at the end of the school year in which the student was last enrolled, or the following year if the student has not re-enrolled in an undergraduate program leading to a bachelor's degree. Students are considered to have left school without a degree when they have been absent for a period of at least two academic years following the last year of enrollment.*

2. *A portion of the studies is done part-time and is added to the average duration of full-time studies. For graduates with a bachelor's degree, the duration of part-time studies varies from 2.2 to 2.5 terms. For those who leave without a degree, the duration of part-time studies varies from 1.7 to 2.0 semesters. For all school leavers, the duration of part-time studies varies from 2.0 to 2.4 semesters.*

Table 3.6a
Proportion of students graduating from a bachelor's program, by gender and last year of enrollment (%)

	1987-1988	1990-1991	1995-1996	2005-2006	2006-2007	2007-2008[e]
Male	55.5	59.7	61.7	64.0	63.4	63.4
Female	56.2	63.1	69.0	70.6	69.5	69.0
Total	**55.9**	**61.5**	**65.9**	**67.9**	**67.0**	**66.7**

Source: Ministère de l'Éducation, du Loisir et du Sport

e: Estimates

Table 3.6b
Average number of semesters completed before leaving a bachelor's program (average for all leavers after 2002-2003), by gender

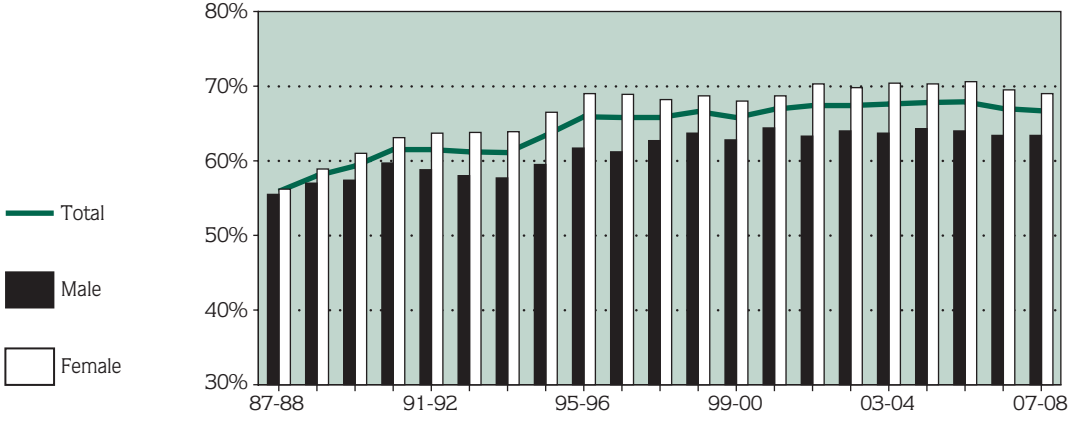
	With Degree		Without Degree[1]		Total	
	Full-time attendance	All attendance[2]	Full-time attendance	All attendance[2]	Full-time attendance	All attendance[2]
Male	6.9	9.2	2.7	4.4	5.3	7.4
Female	6.5	8.8	2.3	4.3	5.2	7.4
Total	**6.7**	**8.9**	**2.5**	**4.3**	**5.2**	**7.4**

Source: Ministère de l'Éducation, du Loisir et du Sport

1. Refers to students who have interrupted their studies for at least six consecutive semesters.

2. Refers to the total duration of full- and part-time studies.

Graph 3.6
Proportion of students graduating from a bachelor's program, by gender and last year of enrollment (%)



3.7 Success and Duration of Studies in Master's Programs

At the end of 2007-2008, 71.5% of students leaving a master's program earned their degree. This is a gain of 15.6 percentage points since 1987-1988.

In 1987-1988, relatively fewer women than men seeking a master's degree pursued their studies to graduation. Since then, women have taken the lead and now have a higher success rate than men. In 2007-2008, 73.5% of women leaving a master's program did so with a degree, an increase of 18.5 percentage points since 1987-1988. The corresponding increase for men was 12.5 percentage points, as 69.5% of men leaving a master's program did so with a degree in 2007-2008. This phenomenon, coupled with the fact that more women than men enroll in master's programs (see Section 2.9), may explain the gender gap with respect to graduation rates (see Section 5.6).

Graduates of master's programs were enrolled for an average of 6.7 semesters, regardless of whether they studied on a full-time or part-time basis. On average, students spent 4.2 semesters in full-time studies. The total average duration of studies for students who left without a degree was 4.6 semesters, whether full-time or part-time. For all students leaving master's programs, the average duration of studies was 6.1 semesters, 3.7 of which were full-time. The duration of studies referred to here is the actual duration and is not compatible with the calculation of full-time equivalents (FTEs) for funding purposes, where a standardized duration is generally recognized for a master's program with a thesis. In these cases, the "funded" duration is a maximum of 4.0 semesters (1.5 years in FTEs) for master's programs. However, the actual duration of studies exceeds this standard for all types of attendance status. This means that students who leave without a master's degree are in practice fully funded, with the exception of a supplementary amount of $1 000 that is allocated to universities when the degree is awarded.

Differences in the duration of studies are apparent in the figures for men and women, and according to the attendance status upon leaving. Contrary to what was observed at the college level and in bachelor's programs, women enrolled in master's programs do not take less time than men to obtain their degree.

For every 100 students leaving a master's program at the end of 2007-2008, 72 earned a degree, after an average of 6.7 semesters of study.

1. *Success in university master's programs is measured here by the proportion of new graduates among all students leaving the programs with or without a degree. The degrees taken into account are master's degrees obtained during or at the end of the school year in which the student was last enrolled, or the following year if the student has not re-enrolled in a graduate program leading to a master's degree. Students are considered to have left school without a degree when they have been absent for a period of at least two years following the last year of enrollment.*

2. *A portion of the studies is done part-time and is added to the average duration of full-time studies. For graduates, the duration of part-time studies varies from 2.8 to 3.5 semesters. For those who leave without a degree, the duration of part-time studies is from 2.4 to 3.0 semesters. For all school leavers, the duration of part-time studies varies from 2.7 to 3.3 semesters.*

Table 3.7a
Proportion of students graduating from a master's program, by gender and last year of enrollment (%)

	1987-1988	1990-1991	1995-1996	2005-2006	2006-2007	2007-2008[e]
Male	57.0	64.4	63.7	70.8	70.5	69.5
Female	55.0	64.5	67.5	73.1	74.1	73.5
Total	**56.1**	**64.5**	**65.6**	**71.9**	**72.3**	**71.5**

Source: Ministère de l'Éducation, du Loisir et du Sport

e: Estimates

Table 3.7b
Average number of terms completed before leaving a master's program (average for all leavers after 2002-2003), by gender

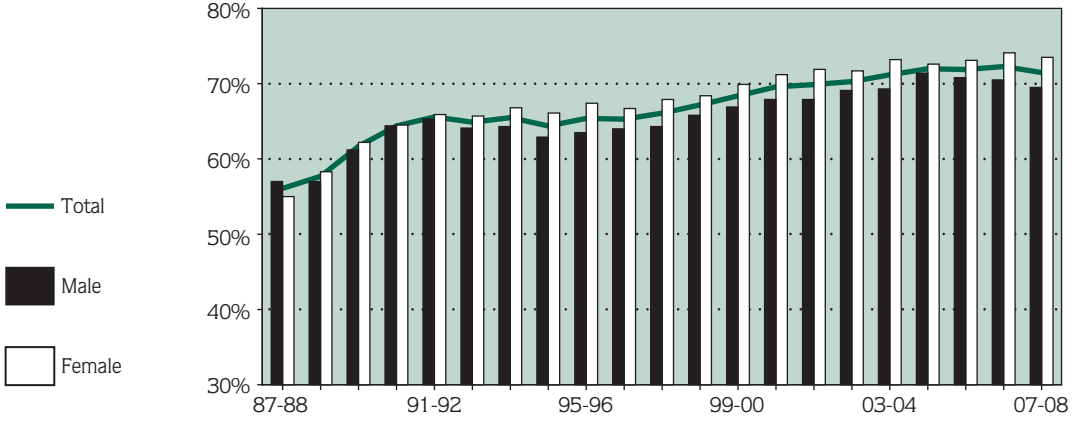
	With Degree		Without Degree[1]		Total	
	Full-time attendance	All attendance[2]	Full-time attendance	All attendance[2]	Full-time attendance	All attendance[2]
Male	4.2	6.6	2.4	4.6	3.6	5.9
Female	4.5	6.8	2.3	4.7	3.9	6.2
Total	**4.4**	**6.7**	**2.3**	**4.6**	**3.7**	**6.1**

Source: Ministère de l'Éducation, du Loisir et du Sport

1. Refers to students who have interrupted their studies for at least six consecutive semesters.

2. Refers to the total duration of full- and part-time studies.

Graph 3.7
Proportion of students graduating from a master's program, by gender and last year of enrollment (%)



3.8 Success and Duration of Studies in Doctoral Programs

At the end of 2007-2008, 55.8% of students leaving a doctoral program earned their degree. Since 1987-1988, this proportion has increased by 7.1 percentage points.

Although traditionally fewer women than men in doctoral programs have obtained their degree, in 2000-2001, for the first time, women's success rate was 1.7 percentage points higher than men's. Of the women enrolled in 2007-2008 who left doctoral programs, 57.3% earned their degree, an increase of 17 percentage points compared with 20 years earlier. The proportion of male candidates who completed their studies in 2007-2008 with a degree was 54.6%, or 2.7 percentage points less than for female candidates. For women, success rates have been steadily rising since 1995-1996. This phenomenon offsets the fact that more men than women enroll in doctoral programs (see Section 2.9), but there are still more men than women who obtain doctoral degrees (see Section 5.6).

Graduates of doctoral programs were enrolled for an average of 15.8 semesters, regardless of whether they studied on a full-time or part-time basis. On average, students spent 14.5 semesters in full-time studies. Those who left without a degree studied for 8.3 semesters, whether full-time or part-time. For students overall, whether they left a doctoral program with or without a degree, they did so after 12.4 semesters, of which 11.1 were full-time. The duration of studies referred to here is the actual duration and is not compatible with the calculation of full-time equivalents (FTEs) for funding purposes, where only a standardized duration is recognized. The "funded" duration is a maximum of 8.0 semesters (3 years in FTEs) for doctoral programs. However, the actual duration of studies exceeds this standard for all types of attendance status. This means that students who leave without a doctorate are in practice fully funded, with the exception of a supplementary amount of $7 000 that is allocated to universities when the degree is awarded.

Differences in the duration of studies are apparent in the figures for men and women, and according to the attendance status upon leaving. Contrary to what was observed at the college level and in bachelor's programs, women enrolled in doctoral programs do not take less time than men to obtain their degree or to leave without one.

> Of the students leaving a doctoral program at the end of 2007-2008, 55.8% earned their degree, on average after 15.8 semesters.

1. *Success in university doctoral programs is measured here by the proportion of new graduates among all students leaving the programs with or without a degree. The degrees taken into account are doctorates obtained during or at the end of the school year in which the student was last enrolled, or the following year if the student has not re-enrolled in a postgraduate program leading to a doctorate. Students are considered to have left school without a degree when they have been absent for a period of at least two academic years following the last year of enrollment.*
2. *A portion of the studies is done part-time and is added to the average duration of full-time studies. For graduates, the duration of part-time studies varies from 2.4 to 5.0 semesters. For those who leave without a degree, the duration of part-time studies is from 2.3 to 3.0 semesters. For all school leavers, the duration of part-time studies varies from 2.4 to 4.0 semesters.*

Table 3.8a
Proportion of students graduating from a doctoral program, by gender and last year of enrollment (%)

	1987-1988	1990-1991	1995-1996	2005-2006	2006-2007	2007-2008[e]
Male	53.1	55.5	60.9	57.0	54.9	54.6
Female	40.3	46.7	48.4	55.5	58.1	57.3
Total	**48.7**	**52.3**	**56.3**	**56.4**	**56.3**	**55.8**

Source: Ministère de l'Éducation, du Loisir et du Sport

e: Estimates

Table 3.8b
Average number of semesters completed before leaving a doctoral program (average for all leavers after 2002-2003), by gender

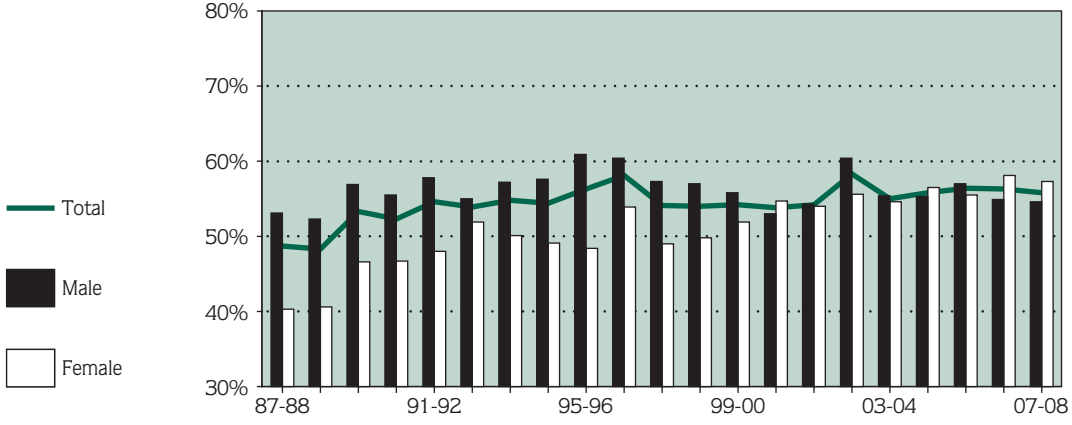
	With Degree		Without Degree[1]		Total	
	Full-time attendance	All attendance[2]	Full-time attendance	All attendance[2]	Full-time attendance	All attendance[2]
Male	14.2	15.3	6.9	8.0	10.9	12.0
Female	14.8	16.4	7.3	8.6	11.4	12.8
Total	**14.5**	**15.8**	**7.1**	**8.3**	**11.1**	**12.4**

Source: Ministère de l'Éducation, du Loisir et du Sport

1. Refers to students who have interrupted their studies for at least six consecutive semesters.

2. Refers to the total duration of full- and part-time studies.

Graph 3.8
Proportion of students graduating from a doctoral program, by gender and last year of enrollment (%)



4.1 Secondary School Examination Results, by Several Variables—Youth Sector

The Ministère de l'Éducation, du Loisir et du Sport administers uniform examinations to students in Secondary IV and V for purposes of certification. The average mark for the June 2009 examinations was 74.4% and the success rate was 87.4%.

While female students have a much better record than male students for staying in school, they have no clear advantage over male students with regard to the results obtained on uniform examinations. The slight difference may be because of the higher dropout rate among male students, for it is usually the weaker students who leave school before graduation.

The average mark obtained by students in private schools was 81.6%, 8.8 percentage points higher than the average mark obtained in the public system (72.8%). The success rate was 85.6% in the public system, compared with 96.6% in the private system. One of the factors likely to explain these differences[1] is that private schools can impose selection criteria for admitting students.

Students who received instruction in French obtained slightly better results on the examinations than students who studied in English. The average mark of students studying in French was 4.2 percentage points higher than that of students studying in English; the success rate of students studying in French was 4.6 percentage points higher than that of students studying in English.

The best results were obtained in Secondary V English, second language, and the poorest, in Secondary V Mathematics. The success rate was 91.2% for the Secondary V French, language of instruction, examination and 93.4% for the Secondary V English, language of instruction, examination.

Female students outperformed male students in French and English language of instruction. In the other subjects, there was little difference.

The success rate on the Ministère's June 2009 secondary school uniform examinations was 87.4%.

1. *This figure is calculated on the basis of the students' final marks. The final mark is made up, in equal proportions, of the student's result on the uniform examination and the "moderated" school mark. "Moderation" is a procedure that renders the marks assigned by different schools comparable by using the results of the uniform examination for each student group as the basis of comparison.*

2. *"The performance disadvantage observed in public schools largely disappeared after other school factors were taken into consideration . . . In other words, after taking the effect of other school characteristics into consideration, including school average parental SES, public school attendance was associated with higher individual performance." See* Measuring Up: The Performance of Canada's Youth in Reading, Mathematics and Science—OECD PISA Study: First Results for Canadians Aged 15 *(Ottawa: Statistics Canada, No. 81-590-XPE, December 2001), 44.*

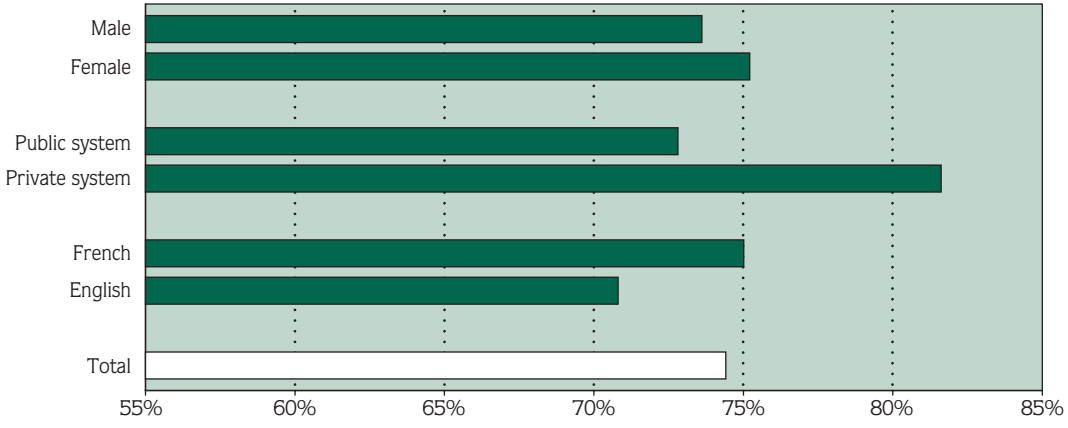
Table 4.1
Results on secondary school uniform examinations in the youth sector, by gender, school system, language of instruction and subject: June 2009 (%)

	Average	Success Rate
Male	73.6	86.4
Female	75.2	88.6
Public system[1]	72.8	85.6
Private system	81.6	96.6
Language of instruction: French	75.0	88.2
Language of instruction: English	70.8	83,6
English, language of instruction (Secondary V)	73.4	93.4
English, second language (Secondary V)	82.2	93.6
French, language of instruction (Secondary V)	72.8	91.2
French, second language (Secondary V)	75.2	91.0
Physical Science 416 (Secondary IV)	71.8	79.2
Mathematics 514 (Secondary V)	63.2	69.2
Total	**74.4**	**87.4**

Source: Ministère de l'Éducation, du Loisir et du Sport

1. *Excludes the Cree School Board, the Kativik School Board and institutions outside the jurisdiction of the Ministère de l'Éducation, du Loisir et du Sport.*

Graph 4.1
Average marks on secondary school uniform examinations in the youth sector, by gender, school system and language of instruction: June 2009 (%)



4.2 Regional Disparities in Secondary School Examination Results—Youth Sector

Seven administrative regions recorded higher averages and success rates than the overall provincial results on the Ministère de l'Éducation, du Loisir et du Sport's June 2009 uniform examinations. These regions are: Chaudière-Appalaches, Capitale-Nationale, Lanaudière, Montréal, Estrie, Montérégie and Centre-du-Québec. Ranked among the lowest were Côte-Nord and Nord-du-Québec.

Regional disparities changed little from 2008 to 2009; however, the difference between the highest and lowest average marks increased from 17.0 to 22.2 percentage points, while the gap in the success rates widened from 31.4 to 40.2 percentage points. The bigger gaps in these differences are attributable in part to a decrease in the average mark and success rate observed in the Nord-du-Québec region.

The results on uniform examinations are not necessarily indicative of the probability of obtaining a secondary school diploma. In some regions, it is possible that a low student retention rate contributes to higher marks on the uniform examinations because the weakest students have dropped out.

The results on the Ministère's June 2009 uniform examinations showed a gap of 40.2 percentage points between the success rates of students in the region with the best performance (89.8%) and those in the region with the poorest performance (49.6%).

1. *Results are calculated on the basis of the students' final marks. The final mark is made up, in equal proportions, of the student's result on the uniform examination and the "moderated" school mark. "Moderation" is a procedure that renders the marks assigned by different schools comparable by using the results of the uniform examination for each student group as the basis of comparison.*

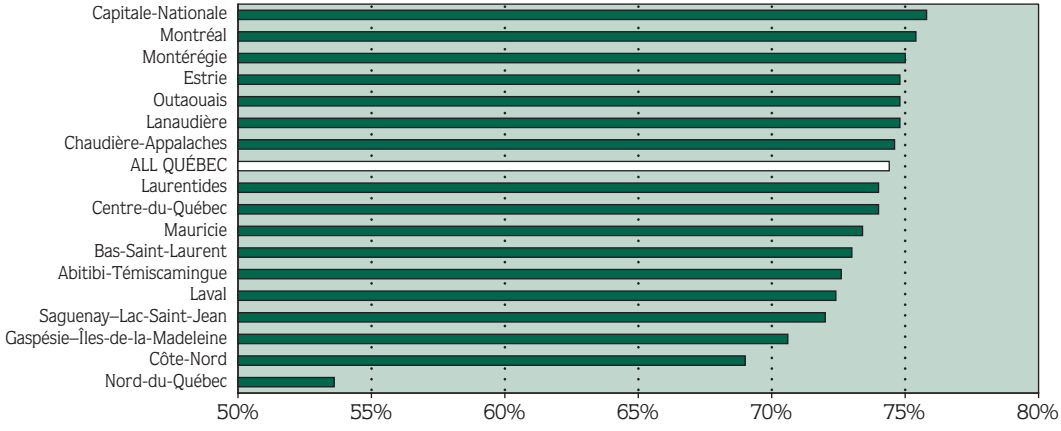
Table 4.2
Results on secondary school uniform examinations in the youth sector, by school administrative region: June 2009 (%)

School Administrative Region	Average	Success Rate
Gaspésie–Îles-de-la-Madeleine	70.6	81.4
Bas-Saint-Laurent	73.0	86.6
Saguenay–Lac-Saint-Jean	72.0	83.4
Capitale-Nationale	75.8	89.6
Chaudière-Appalaches	74.6	89.8
Mauricie	73.4	86.2
Centre-du-Québec	74.0	88.4
Estrie	74.8	88.6
Montérégie	75.0	88.4
Montréal	75.4	88.6
Laval	72.4	84.4
Lanaudière	74.8	89.6
Laurentides	74.0	86.4
Outaouais	74.8	86.6
Abitibi-Témiscamingue	72.6	87.2
Côte-Nord	69.0	77.0
Nord-du-Québec[1]	53.6	49.6
Total	**74.4**	**87.4**

Source: Ministère de l'Éducation, du Loisir et du Sport.

1. *Results for this region include those of the Commission scolaire de la Baie-James, whose average mark and success rate were 69.8% and 78.6%, respectively.*

Graph 4.2
Average marks on secondary school uniform examinations in the youth sector, by school administrative region: June 2009 (%)



4.3 Secondary V French, Language of Instruction, Examination—Youth Sector

Students who took the June 2009 Secondary V French, language of instruction, examination obtained an average mark of 72.8%;[1] the success rate was 91.2%.

The examination consisted of three components: a written production, a reading comprehension exercise and an oral expression test. The reading comprehension and oral expression components were under the responsibility of the educational institutions. The results obtained in these sections are not included in Table 4.3; they were, however, considered in the calculation of the overall results on the French examination. For the written production component, which was under the responsibility of the Ministère de l'Éducation, du Loisir et du Sport, students obtained an average of 73.4% and a success rate of 85.4%.

Whereas there was no significant difference overall between the results obtained by male and female students on the examinations used for purposes of certification, female students clearly outperformed male students on the French examination. The average for female students was 5.2 percentage points above that for male students, and the success rate was 7.4 percentage points in favour of female students. In written production, the female students' average was 4.8 percentage points higher than the male students' and their success rate was 7.6 percentage points higher.

The average obtained by private school students surpassed that of public school students by 5.6 percentage points. In the public system, 10.6% of the students failed the ministry examination, compared with 2.4% in the private system. In written production, students in private schools scored 11.6 percentage points higher than students in the public system. Compared with the June 2008 examination, the success rate for the written production component went from 84.8% to 85.4%. For the examination as a whole, the success rate increased from 88.8% to 91.2%.

The success rate on the Ministère's June 2009 Secondary V French, language of instruction, examination was 91.2%. Female students obtained significantly higher marks than male students.

1. *Results are calculated on the basis of the students' final marks. The final mark is made up, in equal proportions, of the student's result on the uniform examination and the "moderated" school mark. "Moderation" is a procedure that renders the marks assigned by different schools comparable by using the results of the uniform examination for each student group as the basis of comparison.*

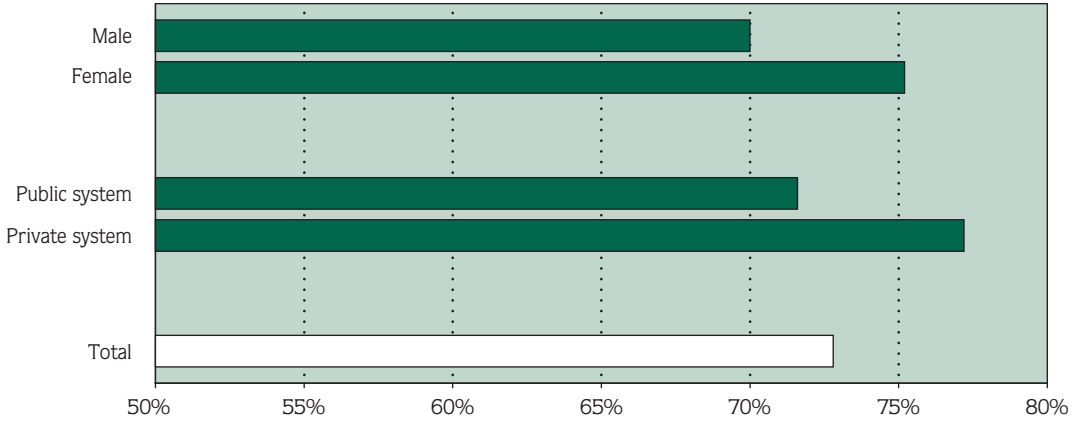
Table 4.3
Results on the Secondary V French, language of instruction, examination in the youth sector, by gender and school system: June 2009 (%)

	Written Production		Overall Results	
	Average	Success Rate	Average	Success Rate
Male	70.8	81.4	70.0	87.2
Female	75.6	89.0	75.2	94.6
Public system[1]	71.8	83.0	71.6	89.4
Private system	78.8	94.6	77.2	97.6
Total	**73.4**	**85.4**	**72.8**	**91.2**

Source: Ministère de l'Éducation, du Loisir et du Sport

1. *Excludes the Cree School Board, the Kativik School Board and institutions outside the jurisdiction of the Ministère de l'Éducation, du Loisir et du Sport.*

Graph 4.3
Average marks on the Secondary V French, language of instruction, examination in the youth sector, by gender and school system: June 2009 (%)



4.4 Ministerial Examination of College French

In 2008-2009, 44 124 college students wrote the ministerial examination of college French, language of instruction and literature.

Since January 1, 1998, students in French CEGEPs have been required to pass this examination to obtain a Diploma of College Studies (DCS). The students must read a series of literary texts and write a 900-word essay on them, thereby demonstrating their ability to understand a variety of texts and produce a structured opinion essay using correct language.

There are three major evaluation criteria for the ministerial examination: I-Comprehension and insight; II-Organization of response; and III-Expression. The first two criteria contain specific subcriteria that are evaluated using a seven-level rating scale: A (very good), B (good), C+ (fair), C (adequate), D (weak), E (very poor) and F (unacceptable). In the Expression criterion, the "appropriate use of words" subcriterion is evaluated using the same rating scale, while sentence structure, punctuation, spelling and grammar are evaluated quantitatively, by counting errors. Students must obtain a C or better for each of the three major criteria. A grade of C represents an adequate level of competence. Therefore, students who obtain a D or worse on any one of the three criteria automatically fail the examination.

In 2008-2009, the overall success rate for the ministerial examination of college French was 82.8%, compared with 83.2% in 2007-2008.

The best results were obtained in Organization of response, on which 36.2% of students received an A. Good results were also obtained in Comprehension and insight, on which 47.8% of students received a B. The results for the third criterion, Expression, were the lowest, on which 85.0% of students received a C or better.

In 2008-2009, the success rate for women was 84.8%, compared with 79.7% for men. The success rate for women was lower than that observed in 2007-2008, while that of men was higher. In 2007-2008, the success rates for women and men were 85.6% and 79.5%, respectively.

Of the college students who took the ministerial examination of college French in 2008-2009, 82.8% passed.

1. *This requirement was postponed until January 1, 2003, for students who passed at least one language and literature course in the old system. Students may retake the examination until they pass it.*

Table 4.4a
Success rate for the ministerial examination of college French, by gender and type of program (%)

	Success Rate			
	2005-2006	2006-2007	2007-2008	2008-2009
Female	83.8	86.2	85.6	84.8
Male	76.7	79.0	79.5	79.7
Pre-university education (DCS)	89.1	90.7	89.9	N/A
Technical training (DCS)	72.6	75.7	75.7	N/A
Other programs	58.4	67.6	64.9	N/A
Overall examination	**81.1**	**83.3**	**83.2**	**82.8**

N/A: Data not available

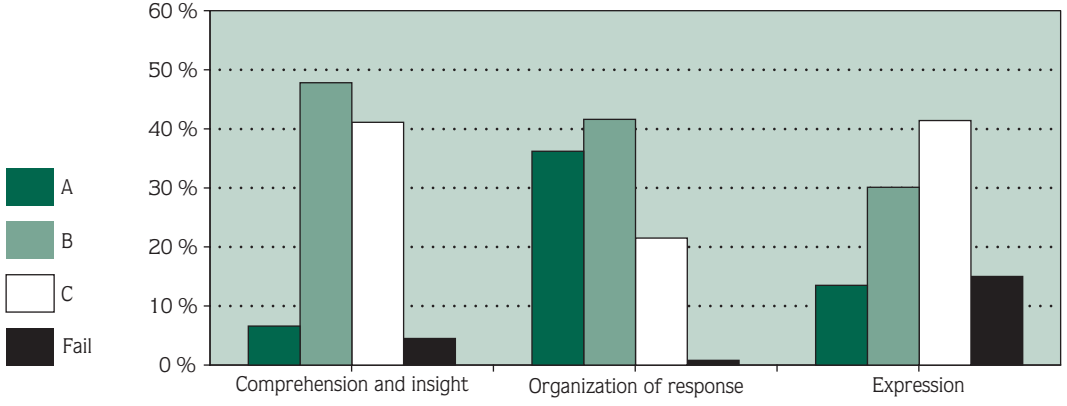
Source: Ministère de l'Éducation, du Loisir et du Sport

Table 4.4b
Distribution of students according to the grade obtained on each criterion of the ministerial examination of college French, 2008-2009 (%)

Criteria for the 2008-2009 examination	Distribution of students				Success Rate
	A	B	C	Fail	
Comprehension and insight	6.6	47.8	41.1	4.5	95.6
Organization of response	36.2	41.6	21.5	0.8	99.3
Expression	13.5	30.1	41.4	15.0	85.0

Source: Ministère de l'Éducation, du Loisir et du Sport

Graph 4.4
Distribution of students according to the grade obtained on each criterion of the ministerial examination of college French, 2008-2009 (%)



5.1 Highest Diploma or Degree Earned

The main data pertaining to diplomas and degrees earned at the various levels of education appear in the diagram on student retention and are presented in more detail in the following sections. Organized in a different way, these data may also show the distribution of a cohort of school leavers according to the highest diploma or degree earned.

Between 1975-1976 and 2007-2008, graduation rates at the secondary and university levels rose sharply for both men and women. During this period, the increase in the proportion of new graduates with bachelor's degrees (from 14.9% to 32.6%) was accompanied, at the other extreme, by a drop of more than two thirds in the proportion of those leaving school without a diploma (from 43.0% to 11.7%). This decline has resulted in an increase in all the other categories.

Thus, the proportion of school leavers who are not prepared for the labour market, that is, persons without a diploma or with only a Secondary School Diploma (SSD) in general education or a pre-university Diploma of College Studies (DCS) (including DCSs without mention) dropped from 63.2% in 1975-1976 to 26.5% in 2007-2008. This decline of 36.7 percentage points is reflected by increases of 19.0 percentage points in the proportion of graduates with a bachelor's degree and 19.0 percentage points in the proportion of holders of vocational or technical training diplomas (16.1 and 2.9 percentage points, respectively).

A glance at the situation according to gender highlights the disparities already observed in the schooling of men and women. In 2008, one and a half times more women than men graduated with a bachelor's degree or with a college diploma in technical training (58.1% compared with 35.9%), while half as many women as men left school without a diploma (7.1% compared with 16.1%).

In 2007-2008, 73.5% of those leaving the education system graduated with a bachelor's degree or a diploma in vocational or technical training.

1. *It is assumed that the diplomas or degrees awarded at a given level are preceded by a diploma at a lower level. For example, the number of bachelor's degrees should be a subset of the number of DCSs; it follows that the surplus of DCSs in relation to the bachelor's degrees would represent the number of DCSs that are not followed by a university degree. For this reason, there are no persons with a DCS in pre-university education or a DCS without mention as a last diploma in 1975-1976 and 1995-1996. An additional hypothesis makes it possible to estimate the number of DCSs in technical training that are followed by a bachelor's degree. It is also assumed that secondary school vocational training diplomas are not followed by another higher-level diploma. Partial studies at a given level are grouped with the diploma immediately below: for example, uncompleted college studies are considered with the SSDs in general education.*
2. *This level of schooling is different from the level for the general population as indicated in the census, the latter being primarily a historical reflection of all the generations in question. The level measured here is the schooling for persons currently leaving the education system. It also shows what the general state of schooling would be if current trends were to continue.*

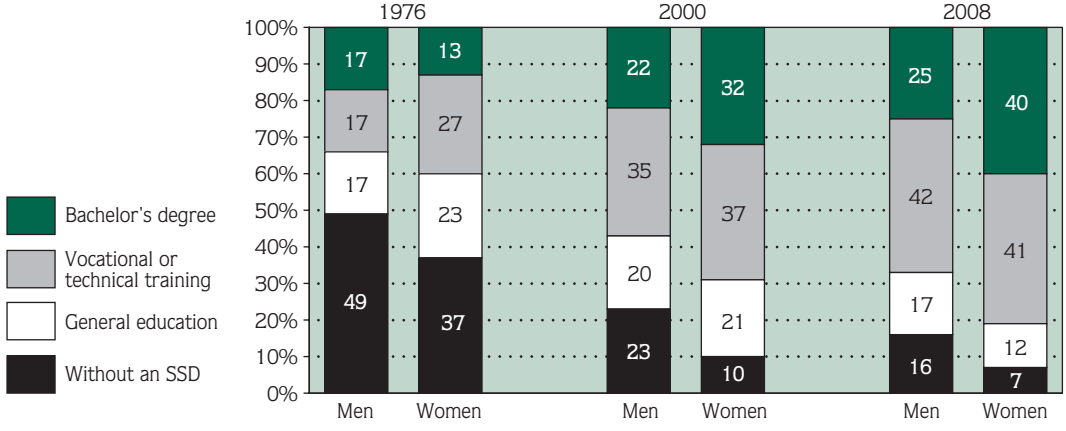
Table 5.1
Distribution of school leavers, by highest diploma or degree earned (%)

	1975-1976	1985-1986	1995-1996	2005-2006	2006-2007	2007-2008
Bachelor's degree[1]	14.9	19.0	29.0	31.4	32.1	32.6
College diploma in technical training[2]	7.4	11.2	11.2	11.0	10.7	10.3
Secondary school vocational diploma[3]	14.5	17.7	19.4	30.6	31.2	30.6
General education (DCS or SSD)	20.2	31.3	28.6	12.5	12.2	14.8
No diploma	43.0	20.8	11.8	14.5	13.8	11.7
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Ministère de l'Éducation, du Loisir et du Sport

1. *Figures for university are based on the calendar year in which the school year ends.*
2. *The diplomas considered here are the Diploma of College Studies (DCS) in technical training, the Attestation of College Studies (ACS) until 1984, the Certificat d'études collégiales (CEC—certificate of college studies) and the Diplôme de perfectionnement de l'enseignement collégial (DPEC—diploma of advanced college studies).*
3. *The diplomas considered here are the Short Vocational Diploma, the Long Vocational Diploma, the Secondary School Vocational Certificate (SSVC), the Diploma of Vocational Studies (DVS—prior to 1998 known as the Secondary School Vocational Diploma [SSVD]), the Attestation of Vocational Specialization (AVS), the Attestation of Vocational Education (AVE) and other secondary school diplomas (SSDs) with mention of vocational specialty.*

Graph 5.1
Distribution of school leavers, by highest diploma or degree earned (%)



5.2 Graduation From Secondary School— Youth and Adult Sectors

The probability of obtaining a secondary school diploma in 2008-2009 was 88.3%. This rate is significantly higher than the one observed in the previous year (87.3% in 2007-2008).

In 2008-2009, for students in the youth sector and for students under 20 years of age in the adult sector in Québec, the probability of obtaining a secondary school diploma was 71.5%. The probability of obtaining a diploma for adults 20 years of age or over increased from 15.1% in 2007-2008 to16.8% in 2008-2009.

The graduation rate discussed here applies mainly to general education. This section is primarily concerned with the first diplomas earned. It is interesting to note that in 2008-2009, 84.7% of all the diplomas earned were first diplomas obtained in general education. This proportion was 97.4% if only diplomas obtained in the youth sector or by students under 20 years of age in the adult sector are considered.

The temporary slump in the graduation rate between 1986 and 1990 was largely due to the raising of the pass mark from 50% to 60%, which has made the diploma more valuable, yet more difficult to obtain. Students seem to have overcome this obstacle since 1989, and the graduation rate continued to rise for a number of years, although it had been dropping steadily since 1998-1999. Finally, since 2003-2004, the rate has been rising steadily and has reached the levels observed in the mid-1990s.

The probability of graduating from secondary school is greater for female students than for male students. The gender gap was nearly 18 percentage points in 1989-1990 and approximately 9 percentage points in 2008-2009. Male students were largely responsible for improved graduation rates between 2007-2008 and 2008-2009.

The graduation rate for female students has remained above 90% since 2003-2004 (90.5 %), reaching 92.9% in 2008-2009. For male students, it passed the 80% mark in 1995-1996, and again in 2007-2008 (it stood at 83.9% in 2008-2009).

The dropout rate is the proportion of the population who would never earn a diploma during their lifetime if the situation observed in a given year were to continue indefinitely. It is the complement to the probability of obtaining a secondary school diploma, presented in this section. The dropout rate was 20.2% in 2002-2003 and 11.7% in 2008-2009.

In 2008-2009, the probability of obtaining a first secondary school diploma in the youth or adult sector was 88.3%.

1. *The probability of obtaining a first secondary school diploma is determined by grouping the first diplomas obtained at the secondary level in general education and vocational training. This indicator is a measure of the proportion of a generation that stays in school until a secondary-level diploma is earned.*
2. *Figures do not include the second or third vocational training diploma that a student may have earned, vocational training diplomas received after a general SSD, or SSDs obtained after a diploma in vocational training.*

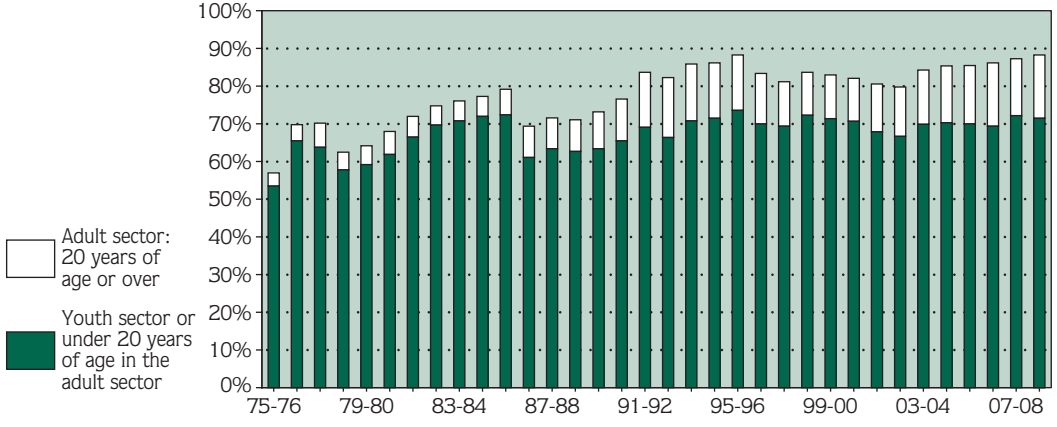
Table 5.2
Probability of obtaining a secondary school diploma in either the youth or the adult sector, by gender (%)

	1975-1976	1985-1986	1995-1996	2005-2006	2007-2008[e]	2008-2009[e]
Total	**57.0**	**79.2**	**88.3**	**85.5**	**87.3**	**88.3**
Adult sector: 20 years of age or over	3.4	6.8	14.7	15.5	15.1	16.8
Youth sector or under the age of 20 in the adult sector	53.5	72.4	73.6	70.0	72.2	71.5
Male	**51.2**	**73.1**	**81.8**	**78.6**	**81.8**	**83.9**
Adult sector: 20 years of age or over	3.0	6.0	14.6	15.6	15.8	17.4
Youth sector or under the age of 20 in the adult sector	48.2	67.1	67.3	63.0	66.0	66.5
Female	**63.1**	**85.6**	**95.2**	**92.7**	**93.1**	**92.9**
Adult sector: 20 years of age or over	4.0	7.6	14.9	15.4	14.4	16.3
Youth sector or under the age of 20 in the adult sector	59.1	78.0	80.3	77.4	78.7	76.7

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

e: Estimates

Graph 5.2
Probability of obtaining a secondary school diploma in either the youth or the adult sector (%)



5.3 Graduation From Secondary School Vocational Training—Youth and Adult Sectors

Based on behaviours observed in 2008-2009, 31 out of 100 Quebeckers can expect to obtain a vocational training diploma in secondary school. This group includes 18 persons who already have a first Secondary School Diploma (SSD) in general education. Since 1997-1998, this proportion has varied between 16 and 19.

Moreover, the probability of obtaining a first secondary school diploma either in the youth sector or under the age of 20 in the adult sector in vocational training was 1.8% in 2008-2009; this rate was over 15% in 1977-1978 and has remained relatively stable since 1996-1997. Students in the youth sector or under the age of 20 in the adult sector who obtain a first secondary school diploma (71.5% in 2008-2009) are most likely to do so in general education (see Section 5.2).

The very nature of vocational training diplomas has also changed. Short vocational programs have been phased out in favour of general education. The basic difference between the Diploma of Vocational Studies (DVS) and its predecessor, the Long Vocational Diploma, is that the DVS deals exclusively with vocational training, since all the components of the vocational programs dealing with general education have been transferred to the SSD.

The difference between male and female students is much less pronounced than in general education. Nevertheless, vocational training represents a larger share of the graduation rate for male students (34.0%) than for female students (27.1%).

The proportion of a generation of students obtaining a secondary school vocational training diploma was 30.6% in 2008-2009.

1. *Refers to the probability of obtaining a first secondary school diploma. This rate is determined by grouping only the first secondary school diplomas in vocational training. This indicator is a measure of the proportion of a generation that stays in school until a secondary-level diploma is earned in vocational training.*
2. *The diplomas considered here are the Short Vocational Diploma, the Long Vocational Diploma, the Secondary School Vocational Certificate (SSVC), the Diploma of Vocational Studies (DVS—known as the Secondary School Vocational Diploma [SSVD] prior to 1998), the Attestation of Vocational Specialization (AVS), the Attestation of Vocational Education (AVE) and other secondary school diplomas (SSDs) with mention of vocational specialty.*

Table 5.3
Probability of obtaining a vocational training diploma, by sector, age and gender (%)

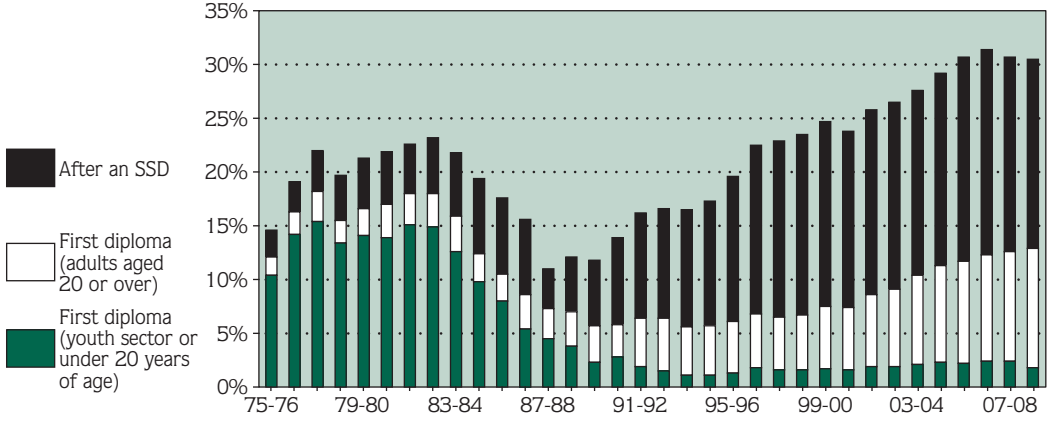
	1975-1976	1985-1986	1995-1996	2005-2006	2007-2008	2008-2009[e]
Total	**14.6**	**17.7**	**19.6**	**30.7**	**30.7**	**30.6**
Male	12.0	17.0	21.2	33.6	33.9	34.0
Female	17.2	18.4	17.9	27.7	27.3	27.1
First diploma	12.1	10.6	6.1	11.8	12.6	13.0
After an SSD[1]	2.5	7.1	13.5	19.0	18.1	17.6
Youth sector or before the age of 20 in the adult sector	**12.0**	**12.8**	**4.7**	**6.5**	**6.4**	**5.7**
First diploma	10.4	8.0	1.3	2.2	2.4	1.8
After an SSD[1]	1.6	4.8	3.5	4.3	4.0	3.9
Adult sector: 20 years of age or over	**2.6**	**4.9**	**14.9**	**24.2**	**24.3**	**24.9**
First diploma	1.7	2.5	4.8	9.5	10.2	11.1
After an SSD[1]	0.9	2.3	10.1	14.7	14.1	13.7

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

e: Estimates

1. SSD: Secondary School Diploma

Graph 5.3
Probability of obtaining a vocational training diploma, by sector and age (%)



5.4 Graduation From Secondary School in Québec and OECD Countries, 2007

In 2009, the Organisation for Economic Co-operation and Development (OECD) published *Education at a Glance*, which contains indicators on graduation from secondary school in OECD countries in 2007.

Table 5.4 compares the situation in Québec with that in a number of industrialized OECD nations with respect to the proportion of graduates from public and private secondary schools out of a total population old enough, in theory, to have obtained a secondary school diploma. In 2007, the secondary school graduation rate in Québec (91%) remained higher than the average for OECD countries.

Of the 24 OECD countries listed in the table,[1] 5 had higher secondary school graduation rates than Québec. Québec's rate was lower than that of Germany, Finland, Greece, Japan and Norway, but higher than that of Ireland, Switzerland, the United Kingdom, the Czech Republic, Iceland, Denmark, Italy, the Slovak Republic, Hungary, Poland, Canada, the United States, Luxembourg, Spain, Sweden, New Zealand, Portugal, Turkey and Mexico.

Except for Switzerland and Turkey, where the secondary school graduation rate for male students is higher than that for female students, female students are generally more likely to graduate than male students. The greatest gender differences are observed in Norway (20 percentage points), New Zealand and Portugal (18 percentage points), Spain and Denmark (15 percentage points), Ireland (12 percentage points) and Hungary (11 percentage points). Québec, with a difference of 14 percentage points, ranks among the group of states where female students are more likely to graduate than male students. In other countries, for example in the United States, graduation rates for male and female students differ less (as seen in Table 5.4).

The graduation rate observed for male students in Québec (84%) was higher than the average for male students in OECD countries. The rate for female students in Québec was 98%, or 11 percentage points higher than the OECD average for female students.

In Québec, there are far more students in general education than there are in vocational training, and this holds true for both male and female students. With a probability of obtaining a diploma in general education of 75% for all students, Québec, like Canada, ranks first among the OECD countries, with a rate of 27 percentage points higher than the OECD average.

The reverse is true in vocational training. The probability of obtaining a diploma in vocational training in Québec is 39%, while the average for the OECD countries is 45%. A number of countries obtained very good results in vocational training, including Finland (87%), the Slovak Republic (71%), Switzerland and the Czech Republic (67%), and Italy (66%).

The probability of obtaining a diploma in vocational training in Québec is only slightly higher for male students (42%) than for female students (36%). It is the sectors of activity in which they enroll that differs for female and male students.

In 2007, the probability of obtaining a secondary school diploma[2] in Québec was 91%, 9 percentage points higher than the average for all OECD countries.

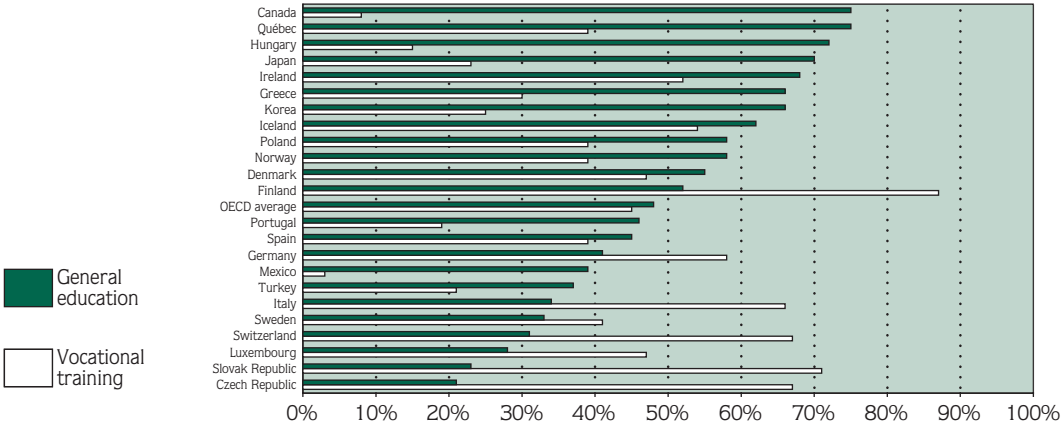
1. *The countries included in the table are those for which the OECD report provides totals and whose number of students per cohort is significant.*
2. *For Québec, this rate was obtained by dividing the number of "first diplomas" awarded in 2007 by the number of 17-year-olds in Québec (the age at which a secondary school diploma is generally awarded in Québec).*

Table 5.4
Probability of obtaining a secondary school diploma, by gender and type of program: Québec and OECD countries, 2007 (%)

	Total (without double counting)			General education		Vocational training	
	M + F	Male	Female	M + F	Female	M + F	Female
Germany	100	99	100	41	47	58	53
Finland	97	92	102	52	62	87	95
Greece	96	93	99	66	74	30	26
Japan	93	92	94	70	74	23	20
Norway	92	82	102	58	71	39	35
Québec	**91**	**84**	**98**	**75**	**85**	**39**	**36**
Korea	91	90	93	66	67	25	25
Ireland	90	84	96	68	71	52	68
Switzerland	89	90	88	31	36	67	61
United Kingdom	89	86	92	N/A	N/A	N/A	N/A
Czech Republic	88	86	90	21	26	67	64
Iceland	86	69	104	62	80	54	53
Denmark	85	78	93	55	66	47	50
Italy	85	82	88	34	45	66	58
Slovak Republic	85	82	87	23	28	71	67
Hungary	84	79	90	72	80	15	12
Poland	84	80	88	58	71	39	35
Canada1	78	74	83	75	80	8	8
United States	78	77	78	N/A	N/A	N/A	N/A
Luxembourg	75	70	79	28	33	47	46
Spain	74	67	82	45	53	39	42
Sweden	74	72	77	33	39	41	38
New Zealand	74	66	84	N/A	N/A	N/A	N/A
Portugal	65	56	74	46	55	19	19
Turkey	58	63	54	37	37	21	17
Mexico	43	39	46	39	43	3	4
OECD average	**82**	**78**	**87**	**48**	**55**	**45**	**43**

Source: OECD, Education at a Glance: OECD Indicators *(Paris, 2009), Table A2.1.*
N/A: Data not available. 1. Reference year: 2006

Graph 5.4
Probability of obtaining a secondary school diploma, general education and vocational training: Québec and OECD countries, 2007 (%)



5.5 Graduation From College

In 2007-2008, the proportion of a generation who could expect to obtain a first college diploma (all diplomas combined) was 49.0%. This is an increase of 26.8 percentage points since 1975-1976, when it stood at 22.2%. The proportion of a generation who could expect to obtain a first Diploma of College Studies (DCS) rose from 21.0% to 40.1%, an increase of 19.1 percentage points.

The more pronounced increase for all diplomas combined is a result of the increase in the official number of graduates holding an Attestation of College Studies (ACS) when it became mandatory to declare ACSs in 2000. The proportion of a generation who are admitted to college (see Section 2.7) and the proportion of students who obtain a diploma upon leaving college (see Sections 3.3 and 3.4) also contribute to this result.

The probability of women obtaining a diploma was more than one and a half times higher than that for men (60.2% compared with 38.2%). The gender gap grew steadily during the 1980s and 1990s. In 1975-1976, the probability of obtaining a college diploma was only 2.7 percentage points higher for women than for men. Since then, the probability has continued to rise more sharply for women, and the gap is now 22.0 percentage points. In the past several years, however, the probability of obtaining a college diploma has remained relatively stable among women, while it has grown slightly for men.

The probability of obtaining a diploma rose most sharply for the pre-university DCS, going from 13.5% to 26.2% between 1975-1976 and 2007-2008, an increase of 12.7 percentage points, compared with 6.4 percentage points for the technical DCS over the same period.

For both types of programs, the number of women graduating exceeded the number of men. The probability of women obtaining a pre-university DCS increased by 20.2 percentage points, compared with 5.3 percentage points for men. On the other hand, the probability of obtaining a technical DCS grew more modestly for both men and women (in absolute numbers), although the increase in technical training for women (8.3 points) was slightly more pronounced than it was for men (5.1 points). As for gender gap in pre-university education, it widened from 4.9 percentage points in 1986-1987 to 13.3 percentage points in 2007-2008 in favour of women.

By 2007-2008 the proportion of female Quebeckers who could expect to obtain a college diploma had risen by 20.9 percentage points since 1985-1986, compared with 8.5 percentage points for male Quebeckers.

1. *The probability of obtaining a first college diploma measures the proportion of a generation that stays in school until a college diploma is earned.*

Table 5.5
Probability of obtaining a first college diploma, by gender and type of education (%)

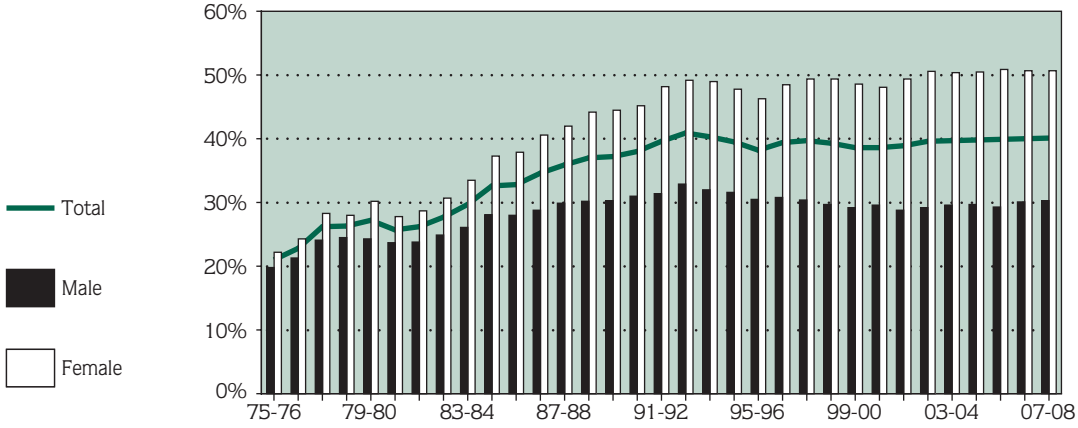
	1975-1976	1985-1986	1995-1996	2005-2006	2006-2007	2007-2008[e]
Male						
All diplomas[1]	20.8	29.7	31.7	37.5	37.8	38.2
DCS [2]	**19.8**	**28.0**	**30.5**	**29.3**	**30.1**	**30.3**
Pre-university education	14.3	18.7	19.4	18.5	19.3	19.6
Technical training	5.5	9.0	10.9	10.8	10.7	10.6
Female						
All diplomas[1]	23.5	39.3	47.4	60.5	60.2	60.2
DCS [2]	**22.2**	**37.9**	**46.3**	**50.9**	**50.7**	**50.7**
Pre-university education	12.7	23.6	29.8	32.1	32.4	32.9
Technical training	9.5	14.0	16.2	18.8	18.3	17.8
Total						
All diplomas[1]	22.2	34.4	39.4	48.7	48.8	49.0
DCS[2]	**21.0**	**32.8**	**38.2**	**39.9**	**40.0**	**40.1**
Pre-university education	13.5	21.1	24.5	25.1	25.7	26.2
Technical training	7.5	11.4	13.5	14.7	14.3	13.9

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

e: Estimates

1. *The diplomas considered here are the Diploma of College Studies (DCS), the Attestation of College Studies (ACS), the Certificat d'études collégiales (CEC—certificate of college studies) and the Diplôme de perfectionnement de l'enseignement collégial (DPEC—diploma of advanced college studies). Since 1994, there have been no new enrollments in programs leading to a CEC or to a DPEC. The more pronounced increase for all diplomas combined is a result of the rise in the official number of graduates holding an ACS when it became mandatory to declare ACSs in 2000.*
2. *These figures include DCSs without mention of specialty.*

Graph 5.5
Probability of obtaining a first college diploma (DCS), by gender (%)



5.6 Graduation From University[1]

Based on behaviours observed in 2008, 32.6% of Quebeckers could expect to obtain a bachelor's degree. In the past several years, the number of women enrolling in university has grown more rapidly than the number of men (see Section 2.9). The situation has changed drastically since 1976, when the probability of obtaining a bachelor's degree was 13.1% for women and 16.7% for men. In 1983, the probability for both groups was more or less similar and, since then, the increase in probability has been in favour of women. In 2008, the probability of obtaining a bachelor's degree for women was 40.3%, and for men, 25.3%, an increase of 27.2 percentage points for women and 8.6 percentage points for men since 1976.

The current rate (32.6%) shows an increase despite a series of drops in university enrollment from 1992-1993 to 1997-1998 (see Section 2.9). The recovery of the university enrollment rate in the past several years has therefor made it possible to attain the Ministère's objective.

With regard to obtaining a master's degree, the results have continued to increase and reached 9.9% for women and 9.3% for men. For both sexes, the rate of 9.6% represents more than triple the 1976 rate of 2.7%. An increase in enrollment at the master's level (see Section 2.9) points to a continued increase in the number of master's degrees awarded for at least a few years to come. The gender gap for master's degrees disappeared in 2003. Since 1976, the situation of men in relation to women has reversed; whereas the initial gap was 1.6 percentage points in favour of men, the probability of women obtaining a master's degree has climbed from 1.9% to 9.9%, an increase of 8.0 percentage points. Since 2007, although a greater proportion of women than men are obtaining a master's degree, the gender gap remains the same. It could widen in favour of women, however, given the growing margin of women earning a bachelor's degree.

Doctorates are still earned by only a very small fraction of the population (1.5%). This last phase in the education system is perhaps the only one in which men continue to outnumber women, although the gap has been narrowing in the past few years. Figures are, however, minimal for both sexes: 1.6% of men obtain a doctorate, compared with 1.4% of women. In view of developments at the master's level and the trend at the doctoral level (see Section 3.8), the pool of aspiring doctoral candidates is also likely to increase for some time to come.

In 2008, the proportion of Quebeckers who could expect to obtain a bachelor's, master's or doctoral degree was 32.6%, 9.6% and 1.5%, respectively. These are the highest rates ever observed for these university degrees.

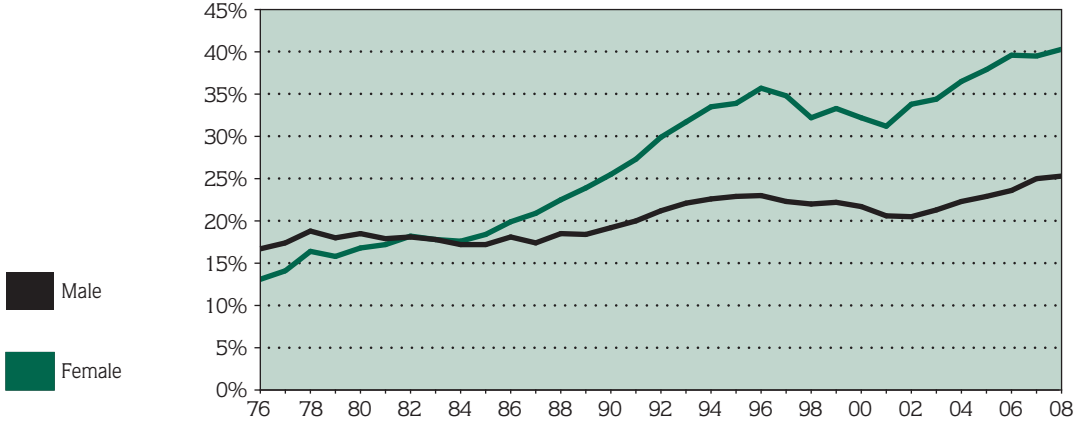
1. *Only university degrees (bachelor's, master's and doctoral degrees) awarded by Québec universities are considered here, including those earned by foreign students. Degrees earned by Quebeckers outside the province are not taken into account.*

Table 5.6
Probability of obtaining a university degree, by gender (%)

	1976	1986	1991	1996	2006	2007	2008
Bachelor's degree	**14.9**	**19.0**	**23.6**	**29.3**	**31.4**	**32.1**	**32.6**
Male	16.7	18.1	20.0	23.0	23.6	25.0	25.3
Female	13.1	19.9	27.3	35.7	39.6	39.5	40.3
Master's degree	**2.7**	**3.9**	**4.4**	**6.1**	**9.1**	**9.2**	**9.6**
Male	3.5	4.4	4.4	5.8	9.3	8.9	9.3
Female	1.9	3.4	4.3	6.3	8.9	9.5	9.9
Doctorate	**0.4**	**0.5**	**0.6**	**0.9**	**1.2**	**1.3**	**1.5**
Male	0.6	0.7	0.9	1.2	1.3	1.4	1.6
Female	0.2	0.3	0.4	0.6	1.0	1.2	1.4

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

Graph 5.6
Probability of obtaining a bachelor's degree, by gender (%)



5.7 University Degrees by Field of Study[1]

In 2008, the largest proportion (22.4%) of bachelor's, master's and doctoral degrees issued by Québec universities were earned in business administration, followed by social sciences (22.1%), applied sciences (16.1%), health sciences (10.3%), education (9.2%) and pure sciences (6.6%). The arts represented 4.2%, literature, 3.8%, law, 2.9%, and multidisciplinary studies, 2.5%, of all degrees awarded.

In 2008, universities in Québec awarded 350 (0.8%) fewer degrees than in the previous year. This decrease was largely due to a decrease of more than one third of degrees awarded in multidisciplinary studies. Degrees in the health sciences and the arts also decreased (3.0% and 3.8%, respectively), while those in social sciences and law both posted gains (3.2% and 1.9%, respectively). The number of degrees awarded in all other fields did not vary significantly.

In 2008, the majority of degree holders were women (57.2%). In most fields of studies, the majority of degrees were awarded to women, who earned 81.1% of the degrees in education, 77.3% in health sciences, 71.5% in literature, 66.1% in social sciences, 63.6% in the arts, and 62.0% in law. Men earned 73.2% of the degrees in applied sciences, 52.0% in pure sciences and 51.1% in business administration. From 1998 to 2008, the proportion of degrees awarded to women increased the most in education (7.2%) and health sciences (5.4%).

Compared to 1998, there was a change in the distribution of degrees awarded according to field of study in 2008. This change involved a more or less significant increase or decrease depending on the field of study. The most significant increase in the proportion of degrees earned was in business administration (3.3 percentage points). The increase was 1.7 percentage points in applied sciences and 1.5 percentage points in health sciences. The proportion of degrees issued in social sciences went from 24.0% in 1998 to 22.1% in 2008, a drop of 1.9 percentage points, which is the strongest decrease of the decade. The proportion of degrees awarded in education, literature and pure sciences also declined during the same period, by 1.4, 1.2 and 1.1 percentage points, respectively.

The distribution of university degrees awarded by field of study changed little from 2007 to 2008. Since 1997, the proportion of degrees awarded in social sciences dropped from 24.0% to 22.1% of all degrees. During the same period, the proportion went from 19.1% to 22.4% in business administration, from 14.4% to 16.1% in applied sciences and from 10.6% to 9.2% education. In 2008, 57.2% of university degrees were awarded to women.

1. *This refers to students who earned a first university degree (bachelor's, master's or doctoral degree) during the year in question.*

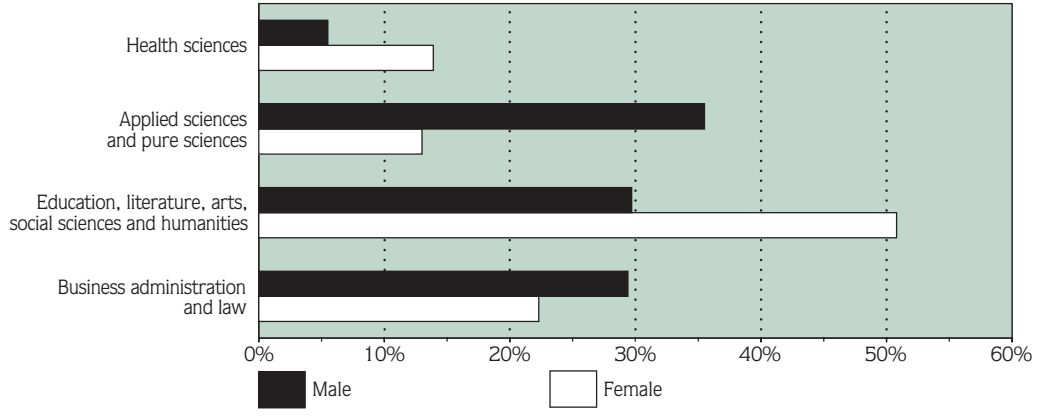
Table 5.7
Distribution of university degrees, by field of study and gender[1] (%)

	1998	2001	2004	2005	2006	2007	2008
Health sciences	8.8	8.2	9.1	9.5	10.4	10.5	10.3
Pure sciences	7.7	7.4	6.5	6.5	6.6	6.5	6.6
Applied sciences	14.4	16.3	17.1	16.7	16.2	15.8	16.1
Social sciences	24.0	21.3	20.7	20.9	20.6	21.3	22.1
Literature	5.0	4.4	3.9	3.8	3.8	3.7	3.8
Law	3.4	3.3	2.6	2.5	2.7	2.8	2.9
Education	10.6	10.9	10.2	9.6	9.3	9.0	9.2
Business administration	19.1	21.2	22.3	22.7	22.6	22.1	22.4
Arts	3.8	4.3	4.3	4.4	4.4	4.4	4.2
Multidisciplinary studies	3.1	2.8	3.3	3.5	3.5	3.8	2.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Female	56.6	57.2	57.6	57.6	57.9	57.5	57.2
Male	43.4	42.8	42.4	42.4	42.1	42.5	42.8

Source: Ministère de l'Éducation, du Loisir et du Sport

1. Only holders of bachelor's, master's or doctoral degrees who obtained their degree in the calendar year in question are considered.

Graph 5.7
Distribution of university degrees, by field of study and gender: 2008 (%)



6.1 Changes in Educational Attainment in the Labour Force

In 2009, as a result of the recession, Québec lost a total of 38 000 jobs. This job loss did not affect the labour force evenly—it mostly affected those without a secondary school diploma (-26 000 jobs), those who did not complete postsecondary studies (-31 000 jobs) and those who completed postsecondary studies (-23 000 jobs). However, the number of jobs held by university graduates increased by 33 000.

The results for 2009 are different from those of the preceding years in several respects; however, they confirm that more and more jobs are held by people with higher levels of education.

Since the early 1990s, there has been a significant increase in the level of education of the labour force in Québec and in Canada as a whole.[1] The data presented in this section are from Statistics Canada. The levels of education considered here correspond to the highest level of education attained by employed workers in a given year.[2] It should be noted, however, that these levels do not necessarily correspond to employment requirements.

In 2009, although there were 704 000 more jobs than in 1990, this 22.4% growth in employment did not benefit all workers. Those who did not finish secondary school or those with only a secondary school diploma had fewer jobs, while those who successfully completed postsecondary or university studies made gains. Thus, 459 000 more jobs were held by individuals with a university education in 2009 than in 1990, an increase of 110.1%. Those with a postsecondary diploma held 661 000 more jobs (+72.5%) in 2009 than in 1990. In short, individuals with some higher education held 1 120 000 more jobs in 2009 than in 1990, which by far exceeds the total increase in the number of jobs during this period (704 000).

Those who began postsecondary studies without completing them held 60 000 more jobs than in 1990, an increase below that of total employment (+10.5% compared with +22.4%).

The situation is very different for those without a secondary school diploma or with only a secondary education. In all, these individuals held 445 000 fewer jobs in 2009 than in 1990. Those with only a secondary school diploma held 33 000 (-5.2%) fewer jobs in 2009. The situation is even more dismal for those without a secondary school diploma: from 1990 to 2009 they held 412 000 fewer jobs, a decrease of 44.7%.

> In 2009, the total number of jobs decreased by 38 000, while the number of jobs held by university graduates increased by 33 000.

1. *According to Statistics Canada terminology, elementary school also includes the first two years of secondary education. Postsecondary studies include all programs leading to diplomas and certificates in the trades (including the Diploma of Vocational Studies—DVS), college diplomas and certificates, and university certificates below the bachelor's level. The university sector begins with programs leading to at least a bachelor's degree.*
2. *The level of education attained by a person may increase over time. It is therefore possible that the same job, held by the same person, will be considered to be held by a person with a higher level of education in a given year compared to an earlier year.*

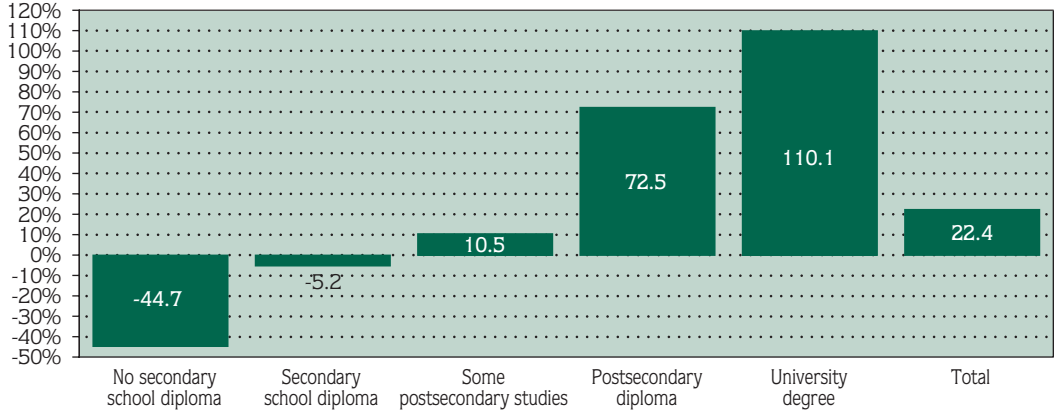
Table 6.1
Employment trends in Québec, by level of education[1] (in thousands)

Year	No secondary school diploma	Secondary school diploma	Some postsecondary studies	Postsecondary diploma	University degree	Total
1990	922	632	258	912	417	3 140
1995	722	549	229	1 077	559	3 135
2000	633	598	277	1 242	655	3 403
2001	613	585	282	1 270	691	3 440
2002	625	596	290	1 367	693	3 570
2003	599	581	316	1 413	719	3 629
2004	592	585	312	1 437	755	3 681
2005	548	608	280	1 482	799	3 717
2006	551	602	261	1 527	824	3 765
2007	535	615	268	1 561	872	3 852
2008	536	591	316	1 596	843	3 882
2009	510	599	285	1 573	876	3 844
Change from 1990 to 2009	- 44.7%	- 5.2%	10.5%	72.5%	110.1%	22.4%

Source: Statistics Canada

1. See notes at the bottom of the text.

Graph 6.1
Employment trends in Québec from 1990 to 2009, by level of education (%)



6.2 Labour Force Participation by Level of Education[1]

As indicated in Section 6.1, in recent years, there has been a rapid increase in the level of education of employees. In 1990, 29.4% of jobs were held by employees who did not have a secondary school diploma, whereas in 2009, this rate was only 13.3%. This phenomenon is not limited to Québec; it is seen in Ontario and the other provinces as well. In Ontario, individuals without a diploma held 26.7% of all jobs in 1990, and only 10.3% in 2009. In the other provinces, the rates were 24.9% in 1990 and 12.0% in 2009.

The proportion of individuals with only a secondary school diploma is also declining, but less quickly.

The percentage of those who started postsecondary studies but did not graduate declined everywhere. In Québec, it decreased from 8.2% to 7.4%; in Ontario, from 10.1% to 7.5%; and in the other provinces, from 10.3% to 9.3%.

Conversely, the proportion of employees with a postsecondary diploma or university degree has increased considerably. In 1990, they held approximately 40% of the jobs in each province. In 2009, the proportions were 63.7% for Québec, 61.9% for Ontario and 56.5% for the other provinces.

There was an especially rapid growth in the employment rate of university graduates: in 1990, they held 13.2% of the jobs in Québec, whereas in 2009, they held more than one in five jobs (22.8%). In Ontario, this proportion is even higher, with close to one in four jobs (28.1%), and in the other provinces, the proportion is the same as in Québec (22.8%).

If the rates for the number of jobs held by graduates with different diplomas or degrees are compared for Québec, Ontario and the other provinces from 1990 to 2009, it can be noted that Québec has been following the same trends as the other regions.

The percentage of jobs held by individuals without a secondary school diploma fell everywhere. However, there is still a significant gap with respect to Ontario (3.0 percentage points) and a smaller gap with respect to the other provinces (1.3 percentage points).

Although the proportion of employed individuals with only a secondary school diploma declined everywhere, it is lower in Québec. It should be noted, however, that it takes a year less of schooling to earn a secondary school diploma in Québec than elsewhere in Canada.

The proportion of employees with a postsecondary diploma increased everywhere, but remained the highest in Québec, no doubt because the college education system is more developed in Québec.

The proportion of jobs held by employees with a university degree in Québec (22.8%) is the same as that of the other provinces; however, there is still a significant gap with respect to Ontario (28.1%), which is 5.3 percentage points ahead.

> In 2009, individuals with a postsecondary diploma or university degree held close to 64% of all jobs in Québec.

1. *According to Statistics Canada terminology, postsecondary studies include all programs leading to diplomas and certificates in the trades (including the Diploma of Vocational Studies—DVS), nonuniversity college diplomas and certificates, and university certificates below the bachelor's level. The university sector begins with programs leading to at least a bachelor's degree.*

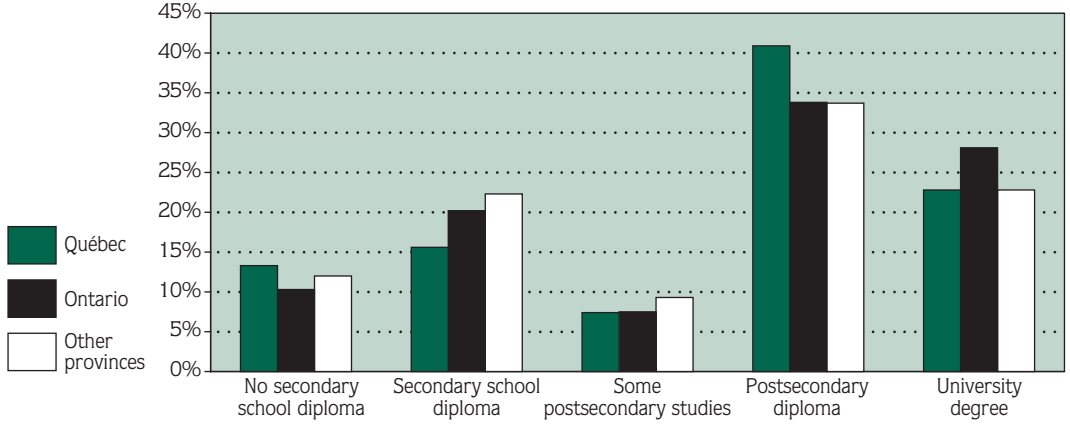
Table 6.2
Employment by highest level of education: Québec, Ontario and the other provinces, 1990 and 2009[1] (%)

	Québec		Ontario		Other provinces	
	1990	2009	1990	2009	1990	2009
Total	100.0	100.0	100.0	100.0	100.0	100.0
No secondary school diploma	29.4	13.3	26.7	10.3	24.9	12.0
Secondary school diploma	20.2	15.6	23.0	20.2	24.3	22.3
Some postsecondary studies	8.2	7.4	10.1	7.5	10.3	9.3
Postsecondary diploma	29.0	40.9	24.0	33.8	27.1	33.7
University degree	13.2	22.8	16.2	28.1	13.4	22.8
Bachelor's degree	9.2	16.2	10.7	18.6	9.4	16.0
Higher degree	4.0	6.6	5.5	9.5	4.0	6.8

Source: Statistics Canada

1. See note at the bottom of the text.

Graph 6.2
Distribution of employment, by highest level of education: Québec, Ontario and the other provinces, 2009 (%)



6.3 Labour Market Integration of Graduates

Each year, a large proportion of secondary school, college and university graduates enter the labour force. The data obtained through the Québec government *Relance* surveys provides a picture of the placement of secondary school vocational training, college technical training and university graduates several months after they obtain their diploma or degree.

On March 31, 2009, 84.2% of graduates with a Diploma of Vocational Studies (DVS) had either found work or were actively looking for work. This proportion was slightly lower (2.6%) than in 2005, when it reached 86.8%.

The proportion of those with an Attestation of Vocational Specialization (AVS) who were in the labour force was 77.1%. Compared with 2005 when this proportion was 82.5%, this represents a decrease of 5.4 percentage points. In 2009, the unemployment rate for these graduates was 10.9%, an increase of 0.8 percentage points compared with 2008, when the unemployment rate was 9.4%. Lastly, the proportion of students with an AVS who were still in school was 14.8%.

On March 31, 2009, 67.8% of students who graduated from a college technical program with a Diploma of College Studies (DCS) were in the labour force, a significant decrease of 3.0 percentage points. The proportion of graduates still studying was 29.8%, compared with 26.8% in 2008. Finally, the unemployment rate for graduates with a DCS in technical training was 4.4% in 2000. This rate has remained relatively low since 2005, fluctuating between 3.6% and 5.5%.

The proportion of university graduates with a bachelor's degree in the labour force has been relatively stable since 2003, fluctuating between 71.9% and 74.0%. In 2009, it stood at 73.1%.

The unemployment rate for university graduates with a bachelor's degree, defined as the ratio between those looking for employment and the labour force as a whole, declined from 5.3% in 2005 to 4.0% in 2007 and 4.5% in 2009.

In 2009, 82.1% of graduates with a master's degree entered the labour force, compared with 78.7% in 2007, a gain of 3.4 percentage points. After increasing in 2003 and 2005, the unemployment rate for these graduates dropped from 5.7% in 2005 to 4.4% in 2007 and then to 4.2% in 2009—the lowest it has been since 2001.

Graph 6.3 shows that the unemployment rate of graduates with a diploma or degree increased in 2009, except among graduates with a master's degree. For these individuals, the unemployment rate dropped from 5.7% in 2005 to 4.2% in 2009, a decrease of 1.5%. During the same period, the unemployment rate for the labour force as a whole in Québec, whose age, training and work experience differ from those of these graduates, rose from 8.8% in 2005 to 9.7% in 2009.

After increasing in 2003 and 2005, the unemployment rate for graduates with a master's degree dropped from 5.7% in 2005, to 4.4% in 2007, to 4.2% in 2009—the lowest since 2001.

1. *Results refer to students graduating in the year indicated, approximately 9 months after the completion of studies for graduates with a DVS or an AVS and roughly 10 months for graduates with a DCS (15 months for those finishing in the fall). The situation for those graduating with a bachelor's or master's degree is as of January, approximately 20 months after they earned their degree.*

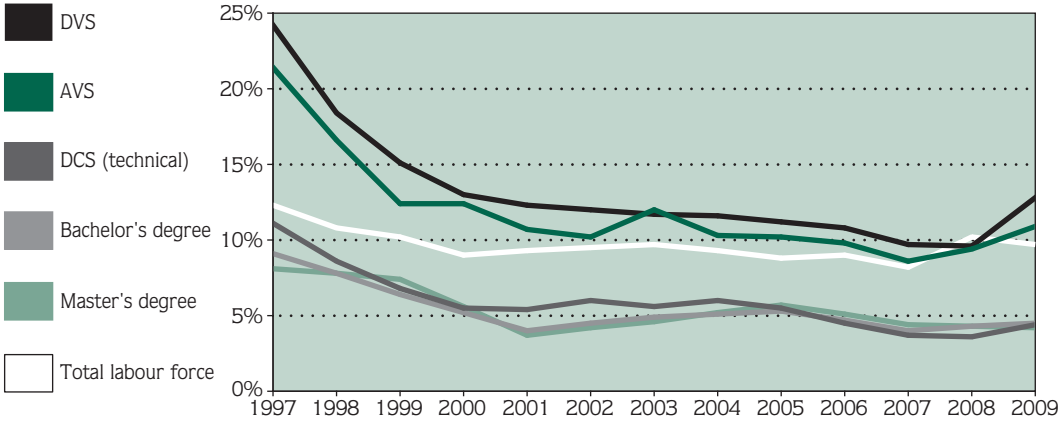
Table 6.3
Unemployment rates for graduates, by level of education and type of diploma or degree (%)

	2005	2006	2007	2008	2009
Secondary education[1]					
DVS	11.2	10.8	9.7	9.6	12.8
AVS	10.2	9.8	8.6	9.4	10.9
College[1]					
Technical training	5.5	4.5	3.7	3.6	4.4
University[1]					
Bachelor's degree	5.3	–	4.0	–	4.5
Master's degree	5.7	–	4.4	–	4.2
Unemployment rate in Québec[2]					
15 to 19-year-olds	21.2	23.7	17.8	15.6	21.2
20 to 24-year-olds	12.7	10.3	10.2	10.2	12.8
25 to 29-year-olds	7.0	8.4	8.3	5.9	8.0
Total labour force	8.8	9.0	8.2	10.2	9.7

1. *Source:* Relance surveys, *Direction de la recherche, des statistiques et de l'information, Ministère de l'Éducation, du Loisir et du Sport.*
2. *Data obtained from Statistics Canada. Includes the total labour force, regardless of level of education and work experience. The unemployment rates are those for March of the year in question (unadjusted data). Source: Statistics Canada, monthly labour force survey estimates (*Labour Force Survey, *Table 282-0001).*

–: *There are no data for these years; the Relance survey of university graduates is conducted every two years.*

Graph 6.3
Unemployment rates for graduates, by type of diploma or degree (%)



6.4 Labour Market Integration of Secondary Vocational Training Graduates

On March 31, 2009, about nine months after graduation, 73.5% of graduates of programs leading to a Diploma of Vocational Studies (DVS) were employed, as were 68.7% of graduates of programs leading to an Attestation of Vocational Specialization (AVS).

On March 31, 2009, 11.2% of DVS graduates in the class of 2007-2008 were studying and 4.5% were inactive. The proportion of individuals with a DVS who were in the labour force (those working or looking for work) was 84.2%, a rate that has remained relatively stable since 2005. The unemployment rate for DVS graduates climbed from 9.6% in 2008 to 12.8% in 2009.

A total of 87.9% of DVS graduates were employed full-time in 2009. This rate has fluctuated little over the past few years. However, an obvious trend persists: more men than women are employed full-time. Men were 14.3 percentage points ahead in 2009 (94.0% compared with 79.7% for women). Men also spent an average of four more hours per week at work (41.4 hours) than women (37.1 hours).

In 2009, 80.3% of DVS graduates working full-time held jobs that were related to their field of study. This rate of correspondence between the field of study and the field of employment has remained relatively stable since 2006, when it was 78.6%. In 2009, 81.3% of women and 79.6% of men held jobs in a field related to their diploma of vocational training.

On March 31, 2009, 8.4% of the class of 2007-2008 who graduated from programs leading to an AVS were looking for work, 14.8% were studying and 8.0% were inactive. The number of AVS graduates in the labour force decreased from 80.6% in 2008 to 77.1% in 2009, a drop of 3.5 percentage points. The unemployment rate was 10.9% in 2009, compared with 9.4% in 2008, an increase of 1.5 percentage points.

A total of 84.7% of AVS graduates were employed full-time in 2009. There is still a large gap between the full-time employment rate for women (77.7%) and that for men (92.1%). The correspondence between the field of study and the field of employment among AVS graduates was 68.3% in 2009.

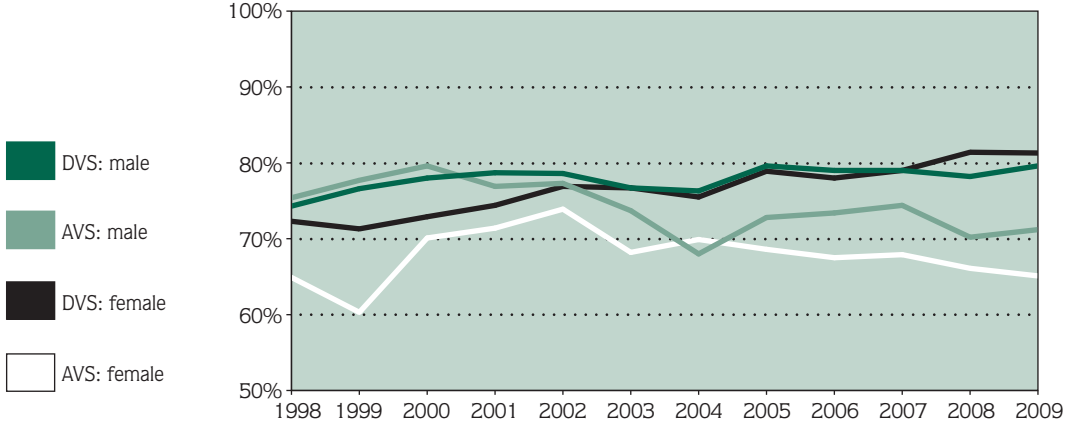
From 2005 to 2009, among those working full-time, the correspondence between the field of study and the field of employment remained stable. Among DVS graduates working full-time, it varied between 78.6% and 80.3%.

Table 6.4
Employment situation of secondary school vocational training graduates, by graduation class, as of March 31 of the year following their graduation (%)

	2005	2006	2007	2008	2009
Graduates with a DVS[1]					
Employed	77.1	76.3	78.3	77.8	73.5
Seeking employment	9.7	9.3	8.4	8.3	10.7
Studying	8.9	10.1	9.2	9.6	11.2
Inactive	4.3	4.2	4.1	4.3	4.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	11.2	10.8	9.7	9.6	12.8
Graduates with an AVS[1]					
Employed	74.1	72.8	75.1	73.0	68.7
Seeking employment	8.4	7.9	7.1	7.6	8.4
Studying	12.1	11.3	10.9	12.1	14.8
Inactive	5.4	7.9	6.9	7.3	8.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	10.3	10.2	8.6	9.4	10.9

Source: Relance *surveys of vocational training graduates, Direction de la recherche, des statistiques et de l'information, Ministère de l'Éducation, du Loisir et du Sport.* http://www.mels.gouv.qc.ca/Relance.

Graph 6.4
Proportion of DVS and AVS graduates working full-time in a related field, as of March 31 of the year following their graduation, by gender (%)



6.5 Labour Market Integration of Graduates of College Technical Programs

The percentage of graduates of technical programs who were employed on March 31, 2009, approximately ten months after they obtained a Diploma of College Studies (DCS), was 64.8%. That year, the proportion of male graduates who were employed was 59.5%, while the proportion of female graduates in the same position was 67.8%, making the difference between the two 8.3 percentage points.

On March 31, 2009, 67.8% of 2007-2008 graduates with a DCS in technical training were part of the labour force (i.e. those working or looking for work), compared with 70.8% in 2008, a drop of 3.0 percentage points. The unemployment rate for graduates with a DCS in technical training rose from 3.6% in 2008 to 4.4% in 2009. Among women, the unemployment rate was 3.4%, while it was 6.4% among men.

Ten months after they earned their diploma, the proportion of graduates still in school on March 31, 2009 was 29.8%. Of the graduates surveyed, 34.9% of men and 26.8% of women were still in school on that date. As a comparison, the respective proportions for men and women in 2008 were 32.9% and 23.2%. Only 5.1% of those still in school were pursuing their studies because they had not found a job. The corresponding percentages were 7.1% in 2005, 5.9% in 2006, 4.9% in 2007 and 4.2% in 2008.

Of all the graduates who were still in school on March 31, 2009, 87.5% were enrolled in a field related to their technical DCS. The vast majority of them (83.3%) were in university, and 90.2% of them were enrolled in a field related to the degree they had obtained in 2007-2008.

On March 31, 2009, 31.0% of part-time workers reported working part-time because they could not find full-time employment, compared with 28.4% in 2008, an increase of 2.6 percentage points.

In 2009, 85.8% of DCS technical graduates were employed full-time (30 hours or more a week); this rate has remained above 85.0% since 2000. However, in 2009, as in the last few years, men were more likely to be employed full-time (90.1%) than women (83.6%). Of those employed full-time, 80.5% had a permanent position (i.e. for an indefinite period of time). This rate has fluctuated slightly over the years.

Of the DCS technical graduates working full-time, 85.0% held a job in their field of study in 2009, compared with 85.8% in 2008. This rate has decreased among men, going from 82.8% in 2008 to 80.2% in 2009, while for women it has increased slightly from 87.4% in 2008 to 87.6% in 2009.

On March 31, 2009, the average gross weekly earnings of DCS technical graduates working full-time in a salaried position increased 3.6%, going from $636 in 2008 to $659 in 2009.

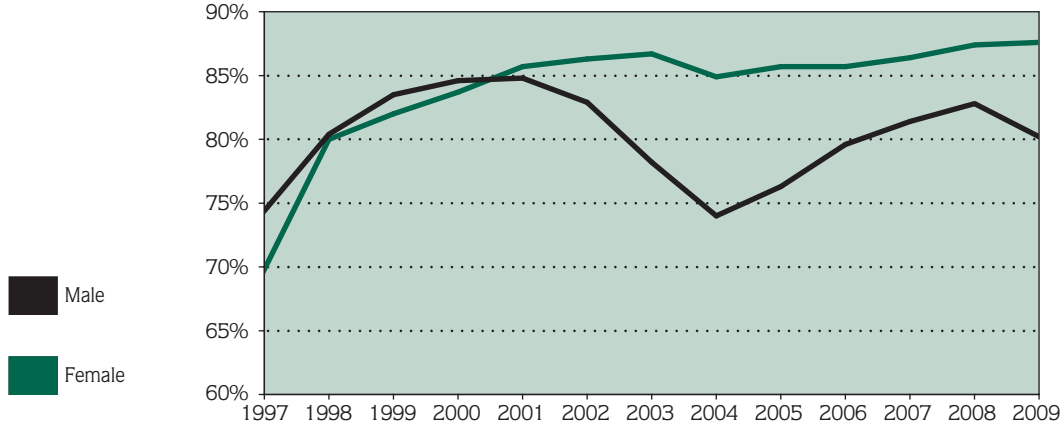
The unemployment rate among graduates with a DCS in technical training went from 3.6% in 2008 to 4.4% in 2009.

Table 6.5
Employment situation of graduates of college technical programs, by graduating class, as of March 31 of the year following their graduation (%)

	2005	2006	2007	2008	2009
Graduates with a DCS					
Employed	65.8	66.7	68.8	68.2	64.8
Seeking employment	3.8	3.1	2.6	2.6	3.0
Studying	27.9	28.1	26.5	26.8	29.8
Inactive	2.4	2.1	2.1	2.3	2.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	5.5	4.5	3.7	3.6	4.4

1. *Source:* Relance *surveys of technical training graduates, Direction de la recherche, des statistiques et de l'information, Ministère de l'Éducation, du Loisir et du Sport.* http://www.mels.gouv.qc.ca/Relance.

Graph 6.5
Proportion of DCS graduates of technical programs working full-time in a related field, as of March 31 of the year following their graduation, by gender (%)



6.6 Employers' Opinions Regarding Graduates of College Technical Programs

In 2009, the Ministère de l'Éducation, du Loisir et du Sport conducted a mail survey of employers who had hired one or more technical training graduates between 2005 and 2009. In all, 1 531 employers, who employed a total of more than 294 000 workers, responded to the survey questionnaire.

Employers' overall assessment of the graduates they hired was average, high or very high in 96.0% of cases in 2009, compared with 95.7% in 2002, and 94.6% in 1997 (see Table 6.6a).

Three months after hiring graduates of technical programs, 76.5% of employers said they were satisfied or very satisfied with the performance of these employees, compared with 78.1% in 2002, 78.6% in 1997 and 80.0% in 1994 (see Table 6.6b). After one year, the proportion reached 93.7%, compared with 94.3% reported in the previous survey.

Graduates of technical programs were preferred by 71.0% of employers hiring technical personnel. However, 13.5% of employers said they frequently or regularly hire employees with less schooling, while 15.2% said they hire individuals with more schooling than usually required for the position.

For more than 85.0% of employers, technical training gives graduates an edge over those without a technical training diploma and better prepares them to perform tasks and adapt quickly to changes. Many believe these graduates have more theoretical knowledge (92.4%), better potential to become a specialist in their field (88.9%) and greater dexterity (85.2%). In addition, 78.4% of employers say that graduates have a better attitude towards their jobs, 72.9% consider them more productive from the outset, 72.6% say they have more creative initiative and 72.5% believe they are more reliable and can plan their work better.

More than two thirds of employers reported having difficulty recruiting qualified workers for jobs associated with technical training. In fact, 64.5% mentioned an insufficient number of qualified candidates (compared with 60.7% in 2002).

Seven out of fifteen selection criteria were deemed important or very important by at least nine out of ten employers. The inclusion of criteria such as "pertinent field of study" (96.6% of employers) and "required diploma" (94.4%) clearly illustrates the importance that employers place on job-related studies and on having a diploma. The importance of criteria such as oral communication skills (96.5%), personality (96.3%), interpersonal skills (95.8%) and performance during interview (95.0%) also shows that employers look for good communication skills. Lastly, candidate's versatility (91.1%) is also considered one of the most important criteria.

The competency profile sought of candidates includes 20 elements (out of a possible 39) for which at least 75.0% of employers have high expectations. They include, in order of importance: knowledge of basic techniques; the ability to work in a team; a sense of responsibility; punctuality; honesty; the ability to understand and follow instructions concerning their work; the ability to communicate orally in French; resourcefulness; the ability to adapt; the ability to be productive at work (accuracy, quality, speed); the ability to plan and organize their work; the ability to listen; personal drive (actions and words); the ability to learn from their everyday work and keep up-to-date; the ability to do their work within the prescribed time; respect for authority; personal commitment to the company and to their job; courtesy towards others; the ability to exercise good judgment; and loyalty to the company. In addition, 74.8% of employers had high expectations regarding the candidate's ability to correctly identify customers' expectations.

Employers were asked to rate their expectations regarding each of the 39 competency elements listed in the survey and to evaluate the graduates they hired with respect to these expectations. An analysis of this evaluation revealed three potentially critical areas that could be improved in order to improve the employability of graduates of technical programs: personal commitment to the company and to their job, the ability to plan and organize their work and loyalty to the company. Although employers have average or high expectations in these three areas, graduates fell short of employer's expectations.

Nine other elements that could be improved, but are not part of the competency profile sought, include the ability to communicate in writing in French, knowledge of French, knowledge of English, the ability to communicate orally and in writing in English, the ability to deal with stressful situations, the ability to solve problems, aptitude for leadership and knowledge of specialized techniques.

In 2009, 96.0% of employers felt that the technical training graduates they hired were competent, and 94.4% also believed that having a technical diploma was an important or very important hiring criterion.

Table 6.6a
Assessment of the level of competence of graduates (% of employers)

	1994[2]	1997	2002	2009
Level of competence[1]				
High	51	52.2	51.3	53.7
Average	44	42.4	44.4	42.3
Low	5	4.7	3.7	3.4
Cannot be determined (don't know)	0	0.7	0.6	0.6

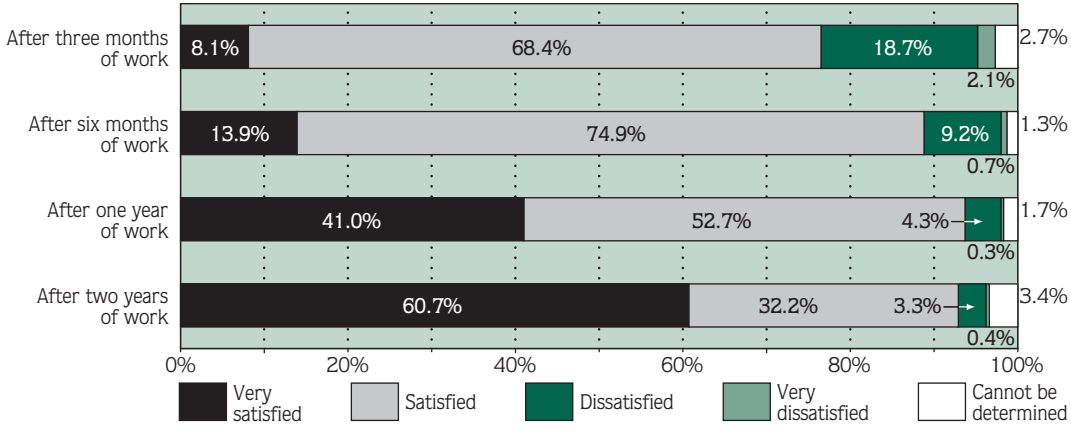
Table 6.6b
Employer satisfaction with graduates' performance (% of employers)

	1994[2]	1997	2002	2009
Satisfied or very satisfied[1]				
After three months of work	80	78.6	78.1	76.5
After six months of work	93	91.6	91.0	88.8
After one year of work	96	93.8	94.3	93.7
After two years of work	N/A	N/A	N/A	92.9

Source: La formation technique au collégial: les employeurs s'expriment, sondage mené en 2009, *Ministère de l'Éducation, du Loisir et du Sport.* http://www.mels.gouv.qc.ca/Relance.

1. *Figures take into account only those employers who responded to the question.*
2. *Rounded data.*

Graph 6.6
Employer satisfaction with the performance of technical training graduates, by length of employment (2009 survey)



Source: La formation technique au collégial : les employeurs s'expriment, sondage mené en 2009. *Ministère de l'Éducation, du Loisir et du Sport.* http://www.mels.gouv.qc.ca/relance.

6.7 Labour Market Integration of University Graduates

The percentage of university graduates who were employed full-time or part-time during the week of January 18 to 24, 2009, approximately 20 months after they obtained their degree, was 69.8% for those with a bachelor's degree and 78.7% for those with a master's degree. That year, 88.6% of graduates with a bachelor's degree and 91.1% of those with a master's degree worked full-time (30 hours or more per week). Their average weekly earnings were $859 and $1 121, respectively.

The percentage of university graduates with a bachelor's degree who were part of the labour force (those working or looking for work) edged up slightly from 72.6% in 2007 to 73.1% in 2009. This proportion stood at 71.9% in 2005, after dropping 2.1 percentage points compared with 2003. The unemployment rate for these graduates, defined as the ratio between those looking for employment and those in the labour force, has varied somewhat over the past few years, dropping from 5.3% in 2005 to 4.0% in 2007, and then rebounding to 4.5% in 2009.

In 2009, 82.1% of university graduates with a master's degree were in the labour force (78.7% were working and 3.4% were looking for work). This figure, the highest since 2003, increased 3.4 percentage points over 2007. The unemployment rate for these graduates dropped 0.2 percentage points, from 4.4% in 2007 to 4.2% in 2009.

During the week of January 18 to 24, 2009, the proportion of graduates with a bachelor's degree still in school was 24.2% (a proportion that has changed little since 2003), while that of graduates with a master's degree was 15.1% (comparable to 2001).

Of those who earned a bachelor's degree in 2007 and were pursuing their studies during the reference period in 2009, 65.6% were enrolled at the master's level, 17.3% at the bachelor's level and 10.8% at the doctoral level. Among these, 89.4% of those enrolled in master's program and 89.9% of those enrolled in a doctoral program were studying in a field related to the degree they obtained in 2007.

In 2009, 8.3% of graduates with a bachelor's degree and 11.6% of those with master's degree said they were still in school because they could not find work.

In 2009, 88.6% of graduates with a bachelor's degree and 91.1% of those with a master's degree worked full-time. Men were more likely to be employed full-time than women. Among those employed full-time during the reference period, 82.1% of those with a bachelor's degree and 85.8% of those with a master's degree held a job in their field of study.

In 2009, 36.6% of graduates with a bachelor's degree and 30.4% of graduates with a master's degree who were working part-time said they did so because they could not find full-time work. In 2007, the corresponding percentages were 38.8% and 24.5%, respectively.

Close to half of graduates with a bachelor's degree (49.7%) found their first significant job without looking for it. Among those with a master's degree, the proportion was 55.5%.

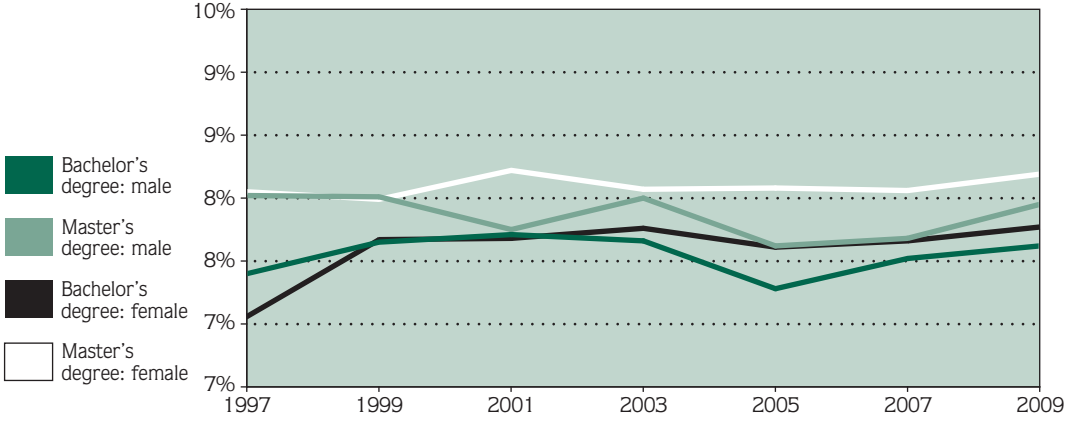
The unemployment rate among university graduates went from 5.3% in 2005 to 4.0% in 2007 and then to 4.2% in 2009.

Table 6.7
Employment situation of university graduates, by graduating class, in January, approximately twenty months following their graduation (%)

	2001	2003	2005	2007	2009
Graduates with a bachelor's degree					
Employed	74.5	70.4	68.1	69.7	69.8
Seeking employment	3.1	3.6	3.8	2.9	3.3
Studying	19.8	22.9	25.0	24.5	24.2
Inactive	2.5	3.1	3.1	2.9	2.7
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	4.0	4.9	5.3	4.0	4.5
Graduates with a master's degree					
Employed	79.2	76.2	73.5	75.2	78.7
Seeking employment	3.1	3.7	4.5	3.5	3.4
Studying	15.2	17.3	18.9	18.4	15.1
Inactive	2.5	2.9	3.1	2.9	2.8
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	3.7	4.6	5.7	4.4	4.2

1. *Source:* Relance *surveys of university graduates, Direction de la recherche, des statistiques et de l'information, Ministère de l'Éducation. du Loisir et du Sport.* http://www.mels.gouv.qc.ca/Relance.

Graph 6.7
Proportion of graduates with a bachelor's or master's degree working full-time in a related field, as of January, 20 months after graduation, by gender (%)



Statistical Appendix

Table 1

Full-time and part-time enrollment, by level of education and sector, 1998-1999 to 2007-2008

	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008[p]
Preschool (4-year-olds)	**15 908**	**15 174**	**14 601**	**15 778**	**15 240**	**14 700**	**14 996**	**14 808**	**14 640**	**14 990**
Preschool (5-year-olds)	**91 513**	**89 223**	**87 297**	**84 624**	**80 967**	**76 832**	**74 801**	**74 123**	**73 970**	**73 964**
Elementary education (youth sector)	**566 372**	**573 102**	**575 862**	**574 274**	**564 559**	**549 073**	**529 860**	**510 340**	**492 631**	**478 540**
Secondary education (youth sector)	**469 250**	**456 148**	**447 937**	**446 491**	**455 467**	**467 594**	**480 319**	**489 054**	**492 217**	**485 381**
Elementary and secondary education (adult sector)[1]	**214 701**	**219 268**	**222 714**	**238 693**	**247 258**	**254 482**	**258 979**	**257 568**	**260 992**	**266 293**
College[2]	**228 737**	**219 231**	**213 444**	**206 402**	**200 814**	**195 850**	**193 523**	**189 350**	**191 410**	**197 158**
Regular education	174 485	171 674	166 990	164 760	163 108	161 005	159 991	159 360	162 300	169 370
Adult education	54 252	47 557	46 454	41 642	37 706	34 845	33 532	29 990	29 110	27 788
University[3]	**226 744**	**232 022**	**233 554**	**239 094**	**249 177**	**258 325**	**261 677**	**264 243**	**265 086**	**266 213**
Undergraduate studies	183 193	187 059	187 518	189 450	195 132	201 130	202 071	203 312	203 209	203 673
Graduate studies	34 625	36 194	37 275	40 808	44 592	46 735	48 197	48 741	49 218	49 412
Postgraduate studies	8 926	8 769	8 761	8 836	9 453	10 460	11 409	12 190	12 659	13 128
Total	**1 813 225**	**1 804 168**	**1 795 409**	**1 805 356**	**1 813 482**	**1 816 856**	**1 814 155**	**1 799 486**	**1 790 946**	**1 782 539**

Sources: Déclaration des clientèles scolaires (DCS)
Déclaration des clientèles en formation professionnelle (DCFP)
Système d'information financière sur la clientèle adulte (SIFCA)
Système d'information et de gestion des données sur l'effectif collégial (SIGDEC)
Système de recensement des clientèles universitaires (RECU)
Gestion des données sur les effectifs universitaires (GDEU)

p: Preliminary data

1. Only persons having taken courses for which credits are earned for certification purposes are included.

2. Fall term. Figures for adult education exclude students enrolled in noncredit programs.

3. Fall term. These figures include resident physicians and some students in college Explorations programs. However, they exclude auditors, postdoctoral trainees and students in Explorations programs.

Table 2

Full-time and part-time enrollment, by category of institution, language of instruction, level of education and sector, 2007-2008[p]

	Preschool		Elementary	Secondary	Elementary and secondary	College[2]		University[3]	Total
	4-year-olds	5-year-olds	(Youth sector)	(Youth sector)	(Adult sector)[1]	Regular education	Adult education		
School boards	**14 844**	**68 962**	**446 186**	**395 696**	**260 282**				**1 185 970**
French	13 887	61 782	397 200	349 425	234 141				1 056 435
English	648	6 619	47 782	46 271	25 900				127 220
Aboriginal languages	309	561	1 204		241				2 315
Private institutions	**28**	**4 903**	**31 618**	**88 722**	**5 308**	**12 284**	**5 442**		**148 305**
French	8	3 942	25 370	80 451	4 866	9 104	4 674		128 415
English	20	961	6 248	8 271	442	3 180	768		19 890
Public institutions outside MELS jurisdiction	**118**	**99**	**736**	**963**	**703**	**1 632**	**120**		**4 371**
French	61	57	586	838	703	1 546	120		3 911
English	14	9	103	115		86			327
Aboriginal languages	43	33	47	10					133
Cegeps and campuses						**155 454**	**22 226**		**177 680**
French						130 666	17 845		148 511
English						24 788	4 381		29 169
Universities and branches								**266 213**	**266 213**
French								199 628	199 628
English								66 585	66 585
Total	**14 990**	**73 964**	**478 540**	**485 381**	**266 293**	**169 370**	**27 788**	**266 213**	**1 782 539**
French	13 956	65 781	423 156	430 714	239 710	141 316	22 639	199 628	1 536 900
English	682	7 589	54 133	54 657	26 342	28 054	5 149	66 585	243 191
Aboriginal languages	352	594	1 251	10	241				2 448

Sources: Déclaration des clientèles scolaires (DCS)
Déclaration des clientèles en formation professionnelle (DCFP)
Système d'information financière sur la clientèle adulte (SIFCA)
Système d'information et de gestion des données sur l'effectif collégial (SIGDEC)
Gestion des données sur les effectifs universitaires (GDEU)

p: Preliminary data

1. Only persons having taken courses for which credits are earned for certification purposes are included.

2. Fall term. Figures for adult education exclude students enrolled in noncredit programs.

3. Fall term. These figures include resident physicians, but exclude auditors, postdoctoral trainees and students in Explorations programs.

Table 3

Enrollment in secondary vocational training and college technical training, 2000-2001 to 2007-2008

	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008[p]
SECONDARY EDUCATION	**95 991**	**99 063**	**101 040**	**104 645**	**108 838**	**106 881**	**105 786**	**108 307**
Under 20 years of age[2]	25 514	25 480	24 923	25 580	26 257	26 281	27 531	29 028
20 years of age or over[3]	70 477	73 583	76 117	79 065	82 581	80 600	78 255	79 279
Regular paths: DVS (SSVD), SSVC, AVS, AVE	**76 559**	**79 395**	**80 288**	**84 552**	**88 156**	**91 118**	**92 087**	**93 862**
Under 20 years of age[2]	24 343	24 044	23 232	23 847	24 530	24 731	26 036	27 085
20 years of age or over[3]	52 216	55 351	57 056	60 705	63 626	66 387	66 051	66 777
Other programs	**19 432**	**19 668**	**20 752**	**20 093**	**20 682**	**15 763**	**13 699**	**14 445**
Under 20 years of age[2]	1 171	1 436	1 691	1 733	1 727	1 550	1 495	1 943
20 years of age or over[3]	18 261	18 232	19 061	18 360	18 955	14 213	12 204	12 502
COLLEGE EDUCATION	**119 948**	**116 525**	**110 979**	**105 924**	**102 952**	**99 369**	**98 076**	**98 079**
Diploma of College Studies (DCS-technical)	87 505	86 844	84 705	81 583	80 092	78 237	77 031	78 291
Certificat d'études collégiales (CEC) Attestation of College Studies (ACS) Diplôme de perfectionnement de l'enseignement collégial (DPEC)	32 443	29 681	26 274	24 341	22 860	21 132	21 045	19 788

Sources: Déclaration des clientèles scolaires (DCS)
Déclaration des clientèles en formation professionnelle (DCFP)
Système d'information financière sur la clientèle adulte (SIFCA)
Système d'information et de gestion des données sur l'effectif collégial (SIGDEC)

p: Preliminary data

DVS: Diploma of Vocational Studies (or SSVD: Secondary School Vocational Diploma, prior to 1998); SSVC: Secondary School Vocational Certificate; AVS: Attestation of Vocational Specialization; AVE: Attestation of Vocational Education

1. *Only persons having taken courses for which credits are earned for certification purposes are included. Persons enrolled in more than one program in the same year are counted only once.*
2. *Includes students 20 years of age or over in the youth sector.*
3. *For the adult sector only.*

Table 4

Personnel in school boards and CEGEPs by job category, based on full-time equivalents,[1] 1999-2000 to 2006-2007

	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007
School boards	**108 772**	**111 464**	**113 184**	**115 751**	**116 203**	**115 206**	**114 553**	**118 083**
Youth and adult sectors								
Teaching staff	71 288	71 918	71 984	72 820	72 606	71 596	71 136	73 606
Administrative staff	1 080	1 076	1 079	1 097	1 143	1 166	1 155	1 246
School principals	3 661	3 713	3 723	3 772	3 807	3 796	3 681	3 690
Managerial staff	685	680	698	721	730	735	745	764
Nonteaching professionals	4 003	4 208	4 453	4 810	4 926	4 992	5 111	5 271
Support staff	28 055	29 869	31 247	32 531	32 991	32 921	32 725	33 506
CEGEPs	**19 869**	**20 491**	**20 636**	**20 744**	**20 609**	**20 319**	**20 093**	**20 521**
Regular education and adult education								
Teaching staff	12 950	13 381	13 355	13 338	13 214	13 005	12 817	13 151
Administrative staff	622	651	690	717	724	640	718	719
Managerial staff	232	233	234	237	225	306	216	227
Nonteaching professionals	1 017	1 086	1 137	1 196	1 185	1 178	1 220	1 249
Support staff	5 048	5 140	5 220	5 256	5 261	5 190	5 122	5 175

Sources: Personnel des commissions scolaires (PERCOS)
Système d'information sur le personnel des organismes collégiaux (SPOC-RFA)

1. All personnel activities carried out during the school year are included in the calculation of full-time equivalents for each job category.

Table 5

Number of diplomas awarded, by level of education and type of diploma, 1998 to 2007

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Secondary[1]	**107 050**	**108 711**	**106 310**	**103 653**	**102 752**	**101 807**	**105 844**	**106 970**	**110 747**	**115 440**
General education	77 315	77 721	74 239	72 880	69 741	67 927	70 453	69 961	71 893	75 778
Vocational training	29 735	30 990	32 071	30 773	33 011	33 880	35 391	37 009	38 854	39 662
College	**45 914**	**47 170**	**51 448**	**52 931**	**53 832**	**53 681**	**53 447**	**53 162**	**52 085**	**48 730**
DCS (pre-university education)	25 185	24 662	24 136	23 715	23 306	23 466	23 453	23 577	23 687	N/A
DVS (technical training)	16 827	17 638	18 000	18 012	18 766	18 205	18 109	17 452	17 012	N/A
DCS without mention	1		1		1	4				
ACS, CEC and DPEC[2]	3 901	4 870	9 311	11 204	11 759	12 006	11 885	12 133	11 386	10 332
University[3]	**50 781**	**50 726**	**50 563**	**51 378**	**54 459**	**58 855**	**62 360**	**64 366**	**64 206**	**65 439**
Bachelor's degree	27 478	28 284	27 822	27 973	28 897	29 818	31 554	32 117	32 988	33 438
Master's degree	6 727	6 814	7 468	7 692	7 946	9 003	9 516	10 002	9 925	9 974
Doctorate	1 231	1 170	1 165	1 094	1 036	1 134	1 217	1 278	1 256	1 427
Certificates and diplomas	15 345	14 458	14 108	14 429	16 139	17 840	18 931	19 580	18 674	18 846
Attestations and microprograms	N/A	N/A	N/A	190	441	1 060	1 142	1 389	1 363	1 754

Sources: Entrepôt de données ministériel (EDM as at 2008-11-18)
Sanction des adultes en formation générale (SAGE)
Système d'information et de gestion des données sur l'effectif collégial (SIGDEC)
Système de recensement des clientèles universitaires (RECU)
Gestion des données sur les effectifs universitaires (GDEU)

DCS: Diploma of College Studies; CEC: Certificat d'études collégiales (certificate of college studies); DPEC: Diplôme de perfectionnement de l'enseignement collégial (diploma of advanced college studies)

1. From 1998-1999 to 2007-2008. The college data is preliminary.

2. Since 1994, there have been no new enrollments in programs leading to CECs and DPECs. ACSs are counted starting in 2001.

3. Excludes diplomas awarded by the Royal Military College Saint-Jean.

N/A: Data not available

Table 6

Schooling rates,[1] by age, gender, level of education and attendance status, 2007-2008 (%)

	Preschool and Elementary Education	Secondary		College		University		Total		
		Full-time	Part time	Full time	Part time	Full time	Part time	Full time	Part-time	All attendance statuses
4-year-olds										
Males	20,6	0,0	0,0	0,0	0,0	0,0	0,0	20,6	0,0	20,6
Females	21,0	0,0	0,0	0,0	0,0	0,0	0,0	21,0	0,0	21,0
Total	20,8	0,0	0,0	0,0	0,0	0,0	0,0	20,8	0,0	20,8
5-year-olds										
Males	96,8	0,0	0,0	0,0	0,0	0,0	0,0	96,8	0,0	96,8
Females	97,3	0,0	0,0	0,0	0,0	0,0	0,0	97,3	0,0	97,3
Total	97,0	0,0	0,0	0,0	0,0	0,0	0,0	97,0	0,0	97,0
15-year-olds										
Males	0,0	95,8	0,6	0,1	0,0	0,0	0,0	95,8	0,6	96,4
Females	0,0	97,1	0,2	0,1	0,0	0,0	0,0	97,2	0,2	97,4
Total	0,0	96,4	0,4	0,1	0,0	0,0	0,0	96,5	0,4	96,9
16-year-olds										
Males	0,4	88,2	3,3	1,5	0,0	0,0	0,0	90,1	3,4	93,4
Females	0,3	91,1	2,1	2,3	0,0	0,0	0,0	93,6	2,1	95,7
Total	0,4	89,6	2,7	1,9	0,0	0,0	0,0	91,8	2,8	95,4
17-year-olds										
Males	0,7	38,1	10,0	36,4	0,3	0,6	0,0	75,7	10,4	86,1
Females	0,4	28,3	8,6	52,9	0,2	0,9	0,0	82,5	8,9	91,3
Total	0,6	33,3	9,3	44,5	0,2	0,8	0,0	79,0	9,7	91,3
18-year-olds										
Males	0,5	23,0	9,0	36,2	0,7	3,7	0,1	63,3	10,0	73,3
Females	0,4	16,4	6,9	54,1	0,7	5,5	0,2	76,3	7,8	84,0
Total	0,5	19,8	8,0	44,9	0,7	4,6	0,1	69,6	8,9	81,3
19-year-olds										
Males	0,5	16,4	6,8	25,1	1,9	12,6	0,5	54,5	9,3	63,8
Females	0,4	12,0	4,6	33,8	1,9	21,5	0,6	67,5	7,3	74,8
Total	0,4	14,3	5,8	29,4	1,9	16,9	0,6	60,8	8,3	71,4

1. *Schooling rates are calculated by dividing the school population of a given age on September 30, 2007, by the population of the same age on the same date. The rates for 4-year-olds and 5-year-olds differ from the results published in Section 2.2 (see notes on this subject).*

Table 6 (cont.)

Schooling rates,[1] by age, gender, level of education and attendance status, 2007-2008 (%)

	Preschool and Elementary Education	Secondary		College		University		Total		
		Full-time	Part time	Full time	Part time	Full time	Part time	Full time	Part-time	All attendance statuses
20- to 24-year-olds										
Males	0,3	7,7	3,9	6,9	1,2	16,1	3,2	30,9	8,3	39,2
Females	0,3	6,3	2,7	9,3	1,4	23,5	4,9	39,2	9,1	48,3
Total	0,3	7,0	3,3	8,1	1,3	19,7	4,0	35,0	8,7	45,1
25- to 29-year-olds										
Males	0,2	3,3	2,3	1,4	0,4	5,2	3,5	10,0	6,3	16,3
Females	0,3	3,3	1,6	2,2	0,6	5,7	5,8	11,4	8,2	19,6
Total	0,3	3,3	1,9	1,8	0,5	5,5	4,6	10,7	7,2	18,7
30- to 39-year-olds										
Males	0,4	2,0	1,5	0,6	0,3	1,6	2,1	4,3	4,1	8,4
Females	0,5	2,4	1,3	1,0	0,4	1,5	3,5	5,2	5,5	10,6
Total	0,4	2,2	1,4	0,8	0,4	1,6	2,8	4,8	4,8	10,1
40- to 49-year-olds										
Males	0,2	1,0	0,9	0,2	0,2	0,3	0,9	1,6	2,1	3,7
Females	0,3	1,2	0,9	0,4	0,3	0,4	1,7	2,1	3,0	5,0
Total	0,2	1,1	0,9	0,3	0,2	0,4	1,3	1,8	2,5	4,6
50- to 59-year-olds										
Males	0,1	0,4	0,5	0,1	0,1	0,1	0,3	0,6	1,0	1,6
Females	0,2	0,5	0,7	0,1	0,1	0,1	0,6	0,7	1,5	2,2
Total	0,1	0,4	0,6	0,1	0,1	0,1	0,5	0,7	1,2	2,0
60-year-olds and over										
Males	0,1	0,1	0,3	0,0	0,0	0,0	0,1	0,1	0,4	0,5
Females	0,1	0,1	0,6	0,0	0,0	0,0	0,1	0,1	0,7	0,8
Total	0,1	0,1	0,5	0,0	0,0	0,0	0,1	0,1	0,1	0,7

1. *Schooling rates are calculated by dividing the school population of a given age on September 30, 2007, by the population of the same age on the same date. The rates for 4-year-olds and 5-year-olds differ from the results published in Section 2.2 (see notes on this subject).*

Definition of Concepts

1. Schooling rate

The schooling rate for a given level of education or a specific age group is the proportion of students who are attending school in relation to the total population for that age group.

Schooling rates are calculated by dividing school enrollments for a given age group by the total population for that age group on the same date.

This rate is presented in Table 6 of the *Education Indicators.*

2. School life expectancy

School life expectancy is the number of years a person, i.e. a child beginning elementary school, can expect to spend in the education system.

School life expectancy is equal to the sum of the schooling rates per year of age, where the numerator is expressed as a full-time equivalent (FTE). This indicator applies to all levels of education, but does not include preschool.

This indicator is presented in Section 2.1 of the *Education Indicators.*

3. Enrollment rate

The enrollment rate measures the likelihood of enrolling in school. It is the proportion of the population that enrolls in a given type or level of education.

To obtain the enrollment rate for a give level of education, we first obtain the ratio between the number of new enrollments in a given age group and the total population for that age group (on September 30). The result is the enrollment rates by age group, which are then added together to obtain the proportion of a cohort enrolled in studies leading to the diploma or degree in question.

At the university level, only programs leading to a bachelor's degree, master's degree or doctorate are considered. Enrollment in programs leading to a certificate, other short programs and independent studies are excluded.

Enrollment rates are presented in sections 2.2, 2.3, 2.4, 2.5, 2.7 and 2.9 of the *Education Indicators.*

4. Probability of obtaining a diploma

The probability of obtaining a diploma is the proportion of the population that obtains a first diploma in a given level of education in a given year. In general, the probability of obtaining a first diploma is calculated by adding the rates for each age or age group. The concept of first diploma means that students who obtain more than one diploma are counted only once.

Probability of obtaining a secondary school diploma

The number of first diplomas obtained at each age group is divided by the total population for the corresponding age group. Adding up the rates for each age group results in the proportion (%) of a cohort that will obtain a secondary school diploma in the youth or adult sector.

See Section 5.2 of the *Education Indicators.*

Comparison with OECD countries

The OECD uses a simple method of calculating the probability of obtaining a secondary school diploma. The method

consists in dividing the total number of diplomas obtained, regardless of age, by the total population for the age at which the diploma is normally awarded.

In Québec, this rate is obtained by dividing the number of first diplomas awarded in a given year by the total population for the age at which the secondary school diploma is theoretically awarded in Québec (17 years of age).

The average for the OECD countries is the arithmetic mean of all OECD countries for which data is available or can be estimated. The number of countries varies from one year to the next.

See Section 5.4 of the *Education Indicators.*

5. Dropout rate

The **dropout rate** is defined as the proportion of the population that has not obtained a secondary school diploma and that is not enrolled in school. This indicator is calculated for each age and has no overall counterpart (see Section 2.6 of the *Education Indicators*).

The **permanent school leaving rate** is defined as the proportion of a cohort that leaves secondary school without obtaining a diploma. It is the complement to the probability of obtaining a secondary school diploma.

Dropping out is different from leaving school, which corresponds to interrupting one's studies without obtaining a diploma. The concept of dropping out allows for the possibility that those who have dropped out without earning a diploma may return to school after a temporary interruption.

The **proportion of school leavers who have not obtained a diploma** in a given year is the opposite of the **success rate**. The success rate is the proportion of students enrolled who obtain a diploma.

The Ministère currently uses three ways of measuring the dropout rate, as explained in *Education Statistics Bulletin 25, March 2003*. In addition to these three concepts, there is also the concept of **interrupted studies,** whose definition varies from one researcher to the next. For example, in the document on student flow from secondary school to university, interrupted studies means that a student was absent from the Québec school system for at least one school year.

6. Academic success rate

The academic success rate measures the proportion of students enrolled in school who obtain a diploma.

Currently, the Ministère uses two ways of calculating the academic success rate: an observation of cohorts (longitudinal study) and an analysis of annual fluctuations in the number of school leavers. The *Education Indicators* uses the second approach since it is a means of rendering accounts to the public and the National Assembly. A Ministère that wants to account for the performance of the school system must have access to the most recent results, which is what an analysis of fluctuations provides. The longitudinal approach, although easier to explain and understand, does not provide such information. The data it provides is old or incomplete and requires a longer follow-up period. Moreover, it would be difficult to compare on an international level. Nevertheless, the longitudinal approach does have advantages, as illustrated in the document on student flow.[1]

1. *Ministère de l'Éducation du Québec*, Student Flow From Secondary School to University *(Québec: Gouvernement du Québec, 2004).*

The method used consists in analyzing annual fluctuations in the number of school leavers instead of following a cohort over a period of years. This methodology is applicable to each level of education and makes it possible to present results for each year. These results provide the same values as those provided by the observation of cohorts (the method used in higher education), despite differences in the concepts.

The proposed concept therefore consists in measuring the success rate in a given level or cycle of education by calculating the proportion of new graduates among all students leaving school with or without a diploma.

Sections 3.1 to 3.8 of the *Education Indicators* measure academic success in various levels of education.

7. Examination results

Sections 4.1, 4.2 and 4.3 present the results and averages obtained on secondary school uniform examinations administered in June. Two types of data are presented in these sections: the **average result** and the **success rate on secondary-level examinations**.

This is a complement to the information contained in the document *Results on the June 2007 Uniform Ministry Examinations and Graduation Rates*.

The **average result** is calculated by dividing the **sum of the final marks** by the **number of students writing the examination.** The **success rate** is calculated by comparing the **number of students who passed the examination** with the **number of students writing the examination**.

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